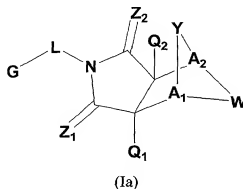


Claims

We claim:

1. A compound of the following formula:

5



wherein the symbols have the following meanings and are, for each occurrence,

- 10 independently selected:

G is an aryl or heterocyclo group, where said group is mono- or polycyclic, and which is optionally substituted at one or more positions;

Z₁ is O, S, NH, or NR⁶;

Z₂ is O, S, NH, or NR⁶;

- 15 A₁ is CR⁷ or N;

A₂ is CR⁷ or N;

Y' is J-J'-J'' where J is (CR⁷R^{7'})_n and n = 0-3, J' is a bond or O, S, S=O, SO₂, NH,

NR⁷, CR⁷R^{7'}, R²P=O, R²P=S, R²OP=O, R²NHP=O, OP=OOR², OP=ONHR²,

OSO₂, NHNH, NHNR⁶, NR⁶NH, N=N, cycloalkyl or substituted cycloalkyl,

- 20 cycloalkenyl or substituted cycloalkenyl, or heterocyclo or substituted

heterocyclo, and J'' is (CR⁷R^{7'})_n and n = 0-3, where Y is not a bond; and

W' is CR⁷R^{7'}—CR⁷R^{7'}, CR⁷R^{7'}—C=O, NR⁹—CR⁷R^{7'}, N=CR⁸, N=N, NR⁹—NR^{9'},

cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl,

heterocyclo or substituted heterocyclo, or aryl or substituted aryl, wherein,

- 25 when W' is not NR⁹—CR⁷R^{7'}, N=CR⁸, N=N, NR⁹—NR^{9'}, or heterocyclo or

- substituted heterocyclo, then J' must be O, S, S=O, SO₂, NH, NR⁷, OP=OOR²,
OP=ONHR², OSO₂, NHNH, NHNH⁶, NR⁶NH, or N=N; or alternatively,
Y' is NR⁷-CR⁷R⁷ and W' is CR⁸=CR⁸; or, alternatively,
Y' is CR⁷R⁷-C=O and W' is NR⁹-CR⁹R⁷;
- 5 Q_i is H, alkyl or substituted alkyl, alkenyl or substituted alkenyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocycloalkyl or substituted heterocycloalkyl, arylalkyl or substituted arylalkyl, alkynyl or substituted alkynyl, aryl or substituted aryl, heterocyclo or substituted heterocyclo, halo, CN, R¹OC=O, R⁴C=O, R²R⁶NC=O,
- 10 HO-CR⁷R⁷, nitro, R¹OCH₂, R¹O, NH₂, C=OSR¹, SO₂R¹ or NR⁴R⁵;
- Q_j is H, alkyl or substituted alkyl, alkenyl or substituted alkenyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocycloalkyl or substituted heterocycloalkyl, arylalkyl or substituted arylalkyl, alkynyl or substituted alkynyl, aryl or substituted aryl, heterocyclo or substituted heterocyclo, halo, CN, R¹OC=O, R⁴C=O, R²R⁶NC=O,
- 15 HO-CR⁷R⁷, nitro, R¹OCH₂, R¹O, NH₂, C=OSR¹, SO₂R¹ or NR⁴R⁵;
- L is a bond, (CR⁷R⁷)_n, NH, NR⁵ or NR⁵(CR⁷R⁷)_n, where n = 0-3;
- R¹ and R¹' are each independently H, alkyl or substituted alkyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo, cycloalkylalkyl or substituted cycloalkylalkyl, cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or substituted heterocycloalkyl, aryl or substituted aryl, arylalkyl or substituted arylalkyl;
- 20 R² is alkyl or substituted alkyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo, cycloalkylalkyl or substituted cycloalkylalkyl, cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or substituted heterocycloalkyl, aryl or substituted aryl, arylalkyl or substituted arylalkyl;
- 25 R² is alkyl or substituted alkyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo, cycloalkylalkyl or substituted cycloalkylalkyl, cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or substituted heterocycloalkyl, aryl or substituted aryl, arylalkyl or substituted arylalkyl;
- 30 R³ and R³' are each independently H, alkyl or substituted alkyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo, cycloalkylalkyl or substituted cycloalkylalkyl,

cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or substituted heterocycloalkyl, aryl or substituted aryl, arylalkyl or substituted arylalkyl, halo, CN, hydroxylamine, hydroxamide, alkoxy or substituted alkoxy, amino, NR^2R^3 , thiol, alkylthio or substituted alkylthio;

- 5 R^4 is H, alkyl or substituted alkyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo, cycloalkylalkyl or substituted cycloalkylalkyl, cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or substituted heterocycloalkyl, aryl or substituted aryl, arylalkyl or substituted arylalkyl, $\text{R}^1\text{C}=\text{O}$, $\text{R}^1\text{NHC}=\text{O}$,
10 SO_2OR^1 , or $\text{SO}_2\text{NR}^1\text{R}^1$;

R^5 is alkyl or substituted alkyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo, cycloalkylalkyl or substituted cycloalkylalkyl, cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or substituted heterocycloalkyl, aryl or substituted aryl, arylalkyl or substituted arylalkyl, $\text{R}^1\text{C}=\text{O}$, $\text{R}^1\text{NHC}=\text{O}$, SO_2R^1 ,
15 SO_2OR^1 , or $\text{SO}_2\text{NR}^1\text{R}^1$;

R^6 is alkyl or substituted alkyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo, cycloalkylalkyl or substituted cycloalkylalkyl, cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or substituted heterocycloalkyl, aryl or substituted aryl, arylalkyl or substituted arylalkyl, CN, OH, OR^1 , $\text{R}^1\text{C}=\text{O}$, $\text{R}^1\text{NHC}=\text{O}$, SO_2R^1 , SO_2OR^1 , or $\text{SO}_2\text{NR}^1\text{R}^1$;

- 20 R^7 and R^7 are each independently H, alkyl or substituted alkyl, alkenyl or substituted alkenyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo, cycloalkylalkyl or substituted cycloalkylalkyl, cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or substituted heterocycloalkyl, aryl or substituted aryl, arylalkyl or substituted arylalkyl, halo, CN, OR^1 , nitro, hydroxylamine, hydroxylamide, amino, NHR^4 , NR^2R^3 , NOR^1 , thiol, alkylthio or substituted alkylthio, $\text{R}^1\text{C}=\text{O}$, $\text{R}^1\text{OC}=\text{O}$, $\text{R}^1\text{NHC}=\text{O}$, SO_2R^1 , SOR^1 ,
25 $\text{PO}_3\text{R}^1\text{R}^1$, $\text{R}^1\text{R}^1\text{NC}=\text{O}$, $\text{C}=\text{OSR}^1$, SO_2R^1 , SO_2OR^1 , or $\text{SO}_2\text{NR}^1\text{R}^1$, or, wherein
30

A_1 or A_2 contains a group R^7 and W contains a group R^7 , said R^7 groups of A_1 or A_2 and W together form a heterocyclic ring;

R^5 and R^6 are each independently H, alkyl or substituted alkyl, alkenyl or substituted alkenyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo, cycloalkylalkyl or substituted cycloalkylalkyl, cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or substituted heterocycloalkyl, aryl or substituted aryl, arylalkyl or substituted arylalkyl, nitro, halo, CN, OR^1 , amino, NHR^4 , NR^2R^5 , NOR^1 , alkylthio or substituted alkylthio, $C=OSR^1$, $R^1OC=O$, $R^1C=O$, $R^1NHC=O$, $R^1R^1'NC=O$, SO_2OR^1 , $S=OR^1$, SO_2R^1 , $PO_3R^1R^{1'}$, or $SO_2NR^1R^{1'}$; and

R^5 and R^6 are each independently H, alkyl or substituted alkyl, alkenyl or substituted alkenyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo, cycloalkylalkyl or substituted cycloalkylalkyl, cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or substituted heterocycloalkyl, aryl or substituted aryl, arylalkyl or substituted arylalkyl, CN, OH, OR^1 , $R^1C=O$, $R^1OC=O$, $R^1NHC=O$, SO_2R^1 , SO_2OR^1 , or $SO_2NR^1R^{1'}$;

with the provisos that:

- (1) when Y' is -O-, Q_1 and Q_2 are hydrogen, Z_1 and Z_2 are O, W' is $-CH_2-CH_2-$, and A_1 and A_2 are CH, then G-L is not phenyl, monosubstituted phenyl or phenyl which is substituted with two or more of the following groups: methoxy, halo, NO_2 , methyl, CH_3-S- , OH, CO_2H , trifluoromethyl, $-C(O)-C_6H_5$, NH_2 , 4-7-epoxy, hexahydro-1H-isindole-1,3(2H)dione, or $-C(O)-CH_3$;
- (2) when Y' is -O-, Q_1 and Q_2 are hydrogen, Z_1 and Z_2 are O, W' is CH_2-CH_2 , and one of A_1 and A_2 is CH and the other is CR^7 , then G-L is not unsubstituted phenyl;
- (3) when Y' is -O-, Q_1 and Q_2 are hydrogen, Z_1 and Z_2 are O, W' is CH_2-CH_2 , and one of A_1 and A_2 is CH and the other is $C-CH_3$, then G-L is not phenyl substituted with chloro and/or methyl;

- (4) when Y' is -O- or -S-, Q₁ and Q₂ are hydrogen, Z₁ and Z₂ are O, W' is CH₂-CH₂, and one of A₁ and A₂ is CH and the other is CH or C-alkyl, then G-L is not N-substituted piperazine-alkyl- or N-substituted imidazolidine-alkyl-;
- 5 (5) when Y' is -O-; Q₁ and Q₂ are hydrogen, Z₁ and Z₂ are O, W' is CH₂-CH₂, and A₁ and A₂ are CH, then G-L is not oxazole or triazole;
- (6) when Y' is -O-; Q₁ and Q₂ are hydrogen or methyl, Z₁ and Z₂ are O, W' is CH₂-CH₂, and A₁ and A₂ are CH or C-CH₃, then G-L is not thiazole or substituted thiazole;
- 10 (7) when Y' contains a group J' selected from S, S=O, SO₂, NH, NR⁷, R²P=O, R²P=S, R²OP=O, R²NHP=O, OP=OOR², OP=ONHR², OSO₂, NNNH, NHR⁶, NR⁷NH or N=N, W' is CR⁷R⁷-CR⁷R⁷, and Z₁ and Z₂ are O, then G-L is not unsubstituted phenyl;
- (8) when Y is NR⁷, W' is unsubstituted or substituted phenyl, and Q₁ and Q₂ are hydrogen, then Z₁ and Z₂ are not O;
- 15 (9) when Y' is —O—, Q₁ and Q₂ are hydrogen, Z₁ and Z₂ are O, W' is dihydroisoxazole bearing an optionally substituted phenyl group, and A₁ and A₂ are CH, then G-L is not unsubstituted phenyl or dichlorophenyl;
- (10) when Y' is O, Q₁ and Q₂ are hydrogen, Z₁ and Z₂ are O, W' is ethylene oxide, and A₁ and A₂ are CH, then G-L is not methylphenyl or chlorophenyl;
- 20 (11) when Y' is NR⁷—CR⁷R⁷, W' is CR⁸=CR⁸, Q₁ and Q₂ are hydrogen, A₁ and A₂ are CH, C-CH₃, C-CH₂-C₆H₅ or C-CH₂-CH₃, and Z₁ and Z₂ are O, then G-L is not unsubstituted phenyl, monosubstituted phenyl or methylpyridinyl;
- (12) when Y' is CR⁷R⁷—C=O, W' is NR⁹—CR⁷R⁷, Q₁ and Q₂ are hydrogen, A₁ and A₂ are CH, and Z₁ and Z₂ are O, then G-L is not unsubstituted phenyl;
- 25 (13) when Y' is CHR⁷—NR⁷ where R⁷ is unsubstituted phenyl, methoxy or ethoxy and R⁷ is unsubstituted phenyl, methyl or -C(O)-C₆H₅, W' is dimethoxyphenylene or unsubstituted phenylene, Z₁ and Z₂ are O, Q₁ and Q₂ are hydrogen, A₁ and A₂ are CH, C-CN, C-C(O)-C₆H₅, or -C(O)-dimethoxyphenyl, then G-L is not unsubstituted phenyl;
- 30 (14) the compound of formula Ia is not 6,10-epithio-4H-thieno-[3',4':5,6]cyclooct[1,2-f]isindole-7,9(5H,8H)dione, 8-(3,5-dichlorophenyl)-

6,6a,9a,10,11,12,-hexahydro-1,3,6,10-tetramethyl-2,2,13-trioxide,
(6R,6aR,9aS,10S);

(15) when Y' is O, W' is $-\text{CH}_2-\text{CH}_2-$, Q₁ and Q₂ are methyl, Z₁ and Z₂ are O,
and A₁ and A₂ are CH, then G-L is not unsubstituted phenyl, phenyl

substituted with methoxy, phenyl-alkyl-, or morpholine-alkyl, nor is the
compound bridged to itself through a group L which is alkylene to form a bis
compound;

(16) when Y' is $-\text{O}-$, Q₁ and Q₂ are hydrogen, Z₁ and Z₂ are O, W' is CR^7R^7-
 CR^7R^7 , and A₁ and A₂ are CH, then G-L is not an unsubstituted phenyl group;
and

(17) when Y' is $-\text{O}-$, Q₁ and Q₂ are hydrogen, Z₁ and Z₂ are O, W' is
cyclopentyl, cyclohexyl, 3-phenyl-2-isoxazoline or $\text{CR}^7\text{R}^7-\text{CR}^7\text{R}^7$ where R⁷
and R⁷ are each independently defined as Cl, Br, H and 4-butyrolactone and
R⁷ and R⁷ are not all simultaneously H, and A₁ and A₂ are CH, then G-L is not
an unsubstituted naphthyl ring or a monosubstituted phenyl ring, where said
substituent is methoxy, Br, Cl, NO₂, methyl, ethyl, CH₂-phenyl, S-phenyl, or
O-phenyl.

2. The compound of Claim 1 wherein

G is an aryl or heterocyclo group, where said group is mono- or polycyclic, and which
is optionally substituted at one or more positions;

Z₁ is O, S, NH, or NR⁶;

Z₂ is O, S, NH, or NR⁶;

A₁ is CR⁷ or N;

A₂ is CR⁷ or N;

Y' is J-J'-J'' where J is $(\text{CR}^7\text{R}^7)_n$ and n = 0-3, J' is a bond or O, S, S=O, SO₂, NH,
NR⁷, CR⁷R⁷, R²P=O, R²P=S, R²OP=O, R²NHP=O, OP=OOR², OP=ONHR²,
OSO₂, NHNH, NHNR⁶, NR⁶NH, N=N, cycloalkyl or substituted cycloalkyl,
cycloalkenyl or substituted cycloalkenyl, or heterocyclo or substituted
heterocyclo, and J'' is $(\text{CR}^7\text{R}^7)_n$ and n = 0-3, where Y' is not a bond;

- W' is $\text{CR}^7\text{R}^{7'}$ — $\text{CR}^7\text{R}^{7'}$, $\text{CR}^7\text{R}^{7'}$ — $\text{C}=\text{O}$, NR^9 — $\text{CR}^7\text{R}^{7'}$, $\text{N}=\text{CR}^8$, $\text{N}=\text{N}$, NR^9 — $\text{NR}^{9'}$,
 cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl,
 heterocyclo or substituted heterocyclo, or aryl or substituted aryl, wherein,
 when W' is not NR^9 — $\text{CR}^7\text{R}^{7'}$, $\text{N}=\text{CR}^8$, $\text{N}=\text{N}$, NR^9 — $\text{NR}^{9'}$, or heterocyclo or
 5 substituted heterocyclo, then J' must be O, S, $\text{S}=\text{O}$, SO_2 , NH, NR^7 , $\text{OP}=\text{OOR}^2$,
 $\text{OP}=\text{ONHR}^2$, OSO_2 , NHNH , NHNR^6 , NR^6NH , or $\text{N}=\text{N}$;
- Q₁ is H, alkyl or substituted alkyl, alkenyl or substituted alkenyl, cycloalkyl or
 substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl,
 heterocycloalkyl or substituted heterocycloalkyl, arylalkyl or substituted
 10 arylalkyl, alkynyl or substituted alkynyl, aryl or substituted aryl, heterocyclo
 or substituted heterocyclo, halo, CN, $\text{R}^1\text{OC}=\text{O}$, $\text{R}^4\text{C}=\text{O}$, $\text{R}^3\text{R}^6\text{NC}=\text{O}$,
 $\text{HOOCR}^7\text{R}^{7'}$, nitro, R^1OCH_2 , R^1O , NH_2 , or NR^4R^5 ;
- Q₂ is H, alkyl or substituted alkyl, alkenyl or substituted alkenyl, cycloalkyl or
 substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl,
 15 heterocycloalkyl or substituted heterocycloalkyl, arylalkyl or substituted
 arylalkyl, alkynyl or substituted alkynyl, aryl or substituted aryl, heterocyclo
 or substituted heterocyclo, halo, CN, $\text{R}^1\text{OC}=\text{O}$, $\text{R}^4\text{C}=\text{O}$, $\text{R}^3\text{R}^6\text{NC}=\text{O}$,
 $\text{HOOCR}^7\text{R}^{7'}$, nitro, R^1OCH_2 , R^1O , NH_2 , or NR^4R^5 ;
- L is a bond, $(\text{CR}^7\text{R}^{7'})_n$, NH, NR^5 or $\text{NR}^5(\text{CR}^7\text{R}^{7'})_n$, where n = 0-3;
- 20 R^1 and $\text{R}^{1'}$ are each independently H, alkyl or substituted alkyl, cycloalkyl or
 substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo
 or substituted heterocyclo, cycloalkylalkyl or substituted cycloalkylalkyl,
 cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or
 substituted heterocycloalkyl, aryl or substituted aryl, arylalkyl or substituted
 25 arylalkyl;
- R^2 is alkyl or substituted alkyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or
 substituted cycloalkenyl, heterocyclo or substituted heterocyclo,
 cycloalkylalkyl or substituted cycloalkylalkyl, cycloalkenylalkyl or substituted
 cycloalkenylalkyl, heterocycloalkyl or substituted heterocycloalkyl, aryl or
 30 substituted aryl, arylalkyl or substituted arylalkyl;

- R^3 and $R^{3'}$ are each independently H, alkyl or substituted alkyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo, cycloalkylalkyl or substituted cycloalkylalkyl, cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or substituted heterocycloalkyl, aryl or substituted aryl, arylalkyl or substituted arylalkyl, halo, CN, hydroxylamine, hydroxamide, alkoxy or substituted alkoxy, amino, NR^1R^2 , thiol, alkylthio or substituted alkylthio;
- R^4 is H, alkyl or substituted alkyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo, cycloalkylalkyl or substituted cycloalkylalkyl, cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or substituted heterocycloalkyl, aryl or substituted aryl, arylalkyl or substituted arylalkyl, $R^1C=O$, $R^1NHC=O$, or $SO_2NR^1R^1$;
- R^5 is alkyl or substituted alkyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo, cycloalkylalkyl or substituted cycloalkylalkyl, cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or substituted heterocycloalkyl, aryl or substituted aryl, arylalkyl or substituted arylalkyl, $R^1C=O$, $R^1NHC=O$, SO_2R^1 , or $SO_2NR^1R^1$;
- R^6 is alkyl or substituted alkyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo, cycloalkylalkyl or substituted cycloalkylalkyl, cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or substituted heterocycloalkyl, aryl or substituted aryl, arylalkyl or substituted arylalkyl, CN, OH, OR^1 , $R^1C=O$, $R^1NHC=O$, SO_2R^1 , or $SO_2NR^1R^1$;
- R^7 and $R^{7'}$ are each independently H, alkyl or substituted alkyl, alkenyl or substituted alkenyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo, cycloalkylalkyl or substituted cycloalkylalkyl, cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or substituted heterocycloalkyl, aryl or substituted aryl, arylalkyl or substituted arylalkyl, halo, CN, OR^1 , nitro,

hydroxylamine, hydroxylamide, amino, NHR^4 , NR^2R^5 , NOR^1 , thiol, alkylthio or substituted alkylthio, $\text{R}^1\text{C}=\text{O}$, $\text{R}^1\text{OC}=\text{O}$, $\text{R}^1\text{NHC}=\text{O}$, SOR^1 , $\text{PO}_3\text{R}^1\text{R}^{1'}$, $\text{R}^1\text{R}^{1'}\text{NC}=\text{O}$, $\text{C}=\text{OSR}^1$, SO_2R^1 , or $\text{SO}_2\text{NR}^1\text{R}^{1'}$;

R^8 and R^8 are each independently H, alkyl or substituted alkyl, alkenyl or substituted

- 5 alkenyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo, cycloalkylalkyl or substituted cycloalkylalkyl, cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or substituted heterocycloalkyl, aryl or substituted aryl, arylalkyl or substituted arylalkyl, nitro, halo, CN, OR^1 , amino, NHR^4 , NR^2R^5 ,
10 NOR^1 , alkylthio or substituted alkylthio, $\text{C}=\text{OSR}^1$, $\text{R}^1\text{OC}=\text{O}$, $\text{R}^1\text{C}=\text{O}$, $\text{R}^1\text{NHC}=\text{O}$, $\text{R}^1\text{R}^{1'}\text{NC}=\text{O}$, $\text{S}=\text{OR}^1$, SO_2R^1 , $\text{PO}_3\text{R}^1\text{R}^{1'}$, or $\text{SO}_2\text{NR}^1\text{R}^{1'}$;

R^9 and $\text{R}^{9'}$ are each independently H, alkyl or substituted alkyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo, cycloalkylalkyl or substituted cycloalkylalkyl,
15 cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or substituted heterocycloalkyl, aryl or substituted aryl, arylalkyl or substituted arylalkyl, CN, OH, OR^1 , $\text{R}^1\text{C}=\text{O}$, $\text{R}^1\text{OC}=\text{O}$, $\text{R}^1\text{NHC}=\text{O}$, or $\text{SO}_2\text{NR}^1\text{R}^{1'}$;

with the provisos (1) to (17) of said formula Ia, and further where (i) when Y' is $-\text{O}-$ and W' is $\text{CR}^7\text{R}^{7'}$ — $\text{CR}^7\text{R}^{7'}$, A_1 and A_2 are not simultaneously CH; and (ii)
20 when L is a bond, G is not an unsubstituted phenyl group.

3. The compound of Claim 1, wherein

- G is an aryl or heterocyclo group, where said group is mono- or polycyclic, and
25 which is optionally substituted at one or more positions;

Z_1 is O;

Z_2 is O;

A_1 is CR^7 ;

A_2 is CR^7 ;

Y' is J-J'-J'' where J is $(CR^7R^7)_{n=0-3}$, J' is a bond or O, S, S=O, SO₂, NH,

NR⁷, CR⁷R^{7'}, R²P=O, R²P=S, R²OP=O, R²NHP=O, OP=OOR², OP=ONHR²,
OSO₂, NHNH, NHNR⁶, NR⁶NH, N=N, cycloalkyl or substituted cycloalkyl,
cycloalkenyl or substituted cycloalkenyl, or heterocyclo or substituted

5 heterocyclo, and J'' is $(CR^7R^7)_{n=0-3}$, where Y' is not a bond;

W' is CR⁷R^{7'}—CR⁷R^{7'}, CR⁷R^{7'}—C=O, NR⁹—CR⁷R^{7'}, N=CR⁸, N=N, NR⁹—NR^{9'},
cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl,
heterocyclo or substituted heterocyclo, or aryl or substituted aryl, wherein,
when W' is not NR⁹—CR⁷R^{7'}, N=CR⁸, N=N, NR⁹—NR^{9'}, or heterocyclo or
10 substituted heterocyclo, then J' must be O, S, S=O, SO₂, NH, NR⁷, OP=OOR²,
OP=ONHR², OSO₂, NHNH, NHNR⁶, NR⁶NH, or N=N;

Q₁ is H, alkyl or substituted alkyl, alkenyl or substituted alkenyl, cycloalkyl or
substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl,
heterocycloalkyl or substituted heterocycloalkyl, arylalkyl or substituted
15 arylalkyl, alkynyl or substituted alkynyl, aryl or substituted aryl, heterocyclo
or substituted heterocyclo, halo, CN, R⁴C=O, R³R⁶NC=O, HOCR⁷R^{7'}, nitro,
R¹OCH₂, R¹O, NH₂, or NR⁴R⁵;

Q₂ is H, alkyl or substituted alkyl, alkenyl or substituted alkenyl, cycloalkyl or
substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl,
20 heterocycloalkyl or substituted heterocycloalkyl, arylalkyl or substituted
arylalkyl, alkynyl or substituted alkynyl, aryl or substituted aryl, heterocyclo
or substituted heterocyclo, halo, CN, R⁴C=O, R³R⁶NC=O, HOCR⁷R^{7'}, nitro,
R¹OCH₂, R¹O, NH₂, or NR⁴R⁵;

L is a bond;

25 R¹ and R^{1'} are each independently H, alkyl or substituted alkyl, cycloalkyl or
substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo
or substituted heterocyclo, cycloalkylalkyl or substituted cycloalkylalkyl,
cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or
substituted heterocycloalkyl, aryl or substituted aryl, arylalkyl or substituted
30 arylalkyl;

- 5 R^2 is alkyl or substituted alkyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo, cycloalkylalkyl or substituted cycloalkylalkyl, cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or substituted heterocycloalkyl, aryl or substituted aryl, arylalkyl or substituted arylalkyl;
- 10 R^3 and $R^{3'}$ are each independently H, alkyl or substituted alkyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo, cycloalkylalkyl or substituted cycloalkylalkyl, cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or substituted heterocycloalkyl, aryl or substituted aryl, arylalkyl or substituted arylalkyl, halo, CN, alkoxy or substituted alkoxy, amino, NR^1R^2 , alkylthio or substituted alkylthio;
- 15 R^4 is H, alkyl or substituted alkyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo, cycloalkylalkyl or substituted cycloalkylalkyl, cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or substituted heterocycloalkyl, aryl or substituted aryl, arylalkyl or substituted arylalkyl, $R^1C=O$, $R^1NHC=O$, or $SO_2NR^1R^{1'}$;
- 20 R^5 is alkyl or substituted alkyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo, cycloalkylalkyl or substituted cycloalkylalkyl, cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or substituted heterocycloalkyl, aryl or substituted aryl, arylalkyl or substituted arylalkyl, $R^1C=O$, $R^1NHC=O$, SO_2R^1 , or $SO_2NR^1R^{1'}$;
- 25 R^6 is alkyl or substituted alkyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo, cycloalkylalkyl or substituted cycloalkylalkyl, cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or substituted heterocycloalkyl, aryl or substituted aryl, arylalkyl or substituted arylalkyl, CN, OH, OR^1 , $R^1C=O$, $R^1NHC=O$, SO_2R^1 , or $SO_2NR^1R^{1'}$;
- 30

- 5 R^7 and $R^{7'}$ are each independently H, alkyl or substituted alkyl, alkenyl or substituted alkenyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo, cycloalkylalkyl or substituted cycloalkylalkyl, cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or substituted heterocycloalkyl, aryl or substituted aryl, arylalkyl or substituted arylalkyl, halo, CN, OR¹, nitro, amino, NHR⁴, NR²R⁵, alkylthio or substituted alkylthio, R¹C=O, R¹NHC=O, SO₂R¹, R¹R^{1'}NC=O, or SO₂NR¹R^{1'};
- 10 R^8 and $R^{8'}$ are each independently H, alkyl or substituted alkyl, alkenyl or substituted alkenyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo, cycloalkylalkyl or substituted cycloalkylalkyl, cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or substituted heterocycloalkyl, aryl or substituted aryl, arylalkyl or substituted arylalkyl, nitro, halo, CN, OR¹, amino, NHR⁴, NR²R⁵, alkylthio or substituted alkylthio, R¹C=O, R¹NHC=O, R¹R^{1'}NC=O, SO₂R¹, or SO₂NR¹R^{1'}; and
- 15 R^9 and $R^{9'}$ are each independently H, alkyl or substituted alkyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo, cycloalkylalkyl or substituted cycloalkylalkyl, cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or substituted heterocycloalkyl, aryl or substituted aryl, arylalkyl or substituted arylalkyl, CN, OH, OR¹, R¹C=O, R¹NHC=O, or SO₂NR¹R^{1'};
- 20 with the provisos (1) to (17) of said formula Ia, and further where (i) when Y' is -O- and W' is CR⁷R^{7'}—CR⁷R^{7'}, A₁ and A₂ are not simultaneously CH; and (ii)
- 25 when L is a bond, G is not an unsubstituted phenyl group.

4. A compound selected from the group consisting of:
(3a α ,4 α ,7 α ,7a α)-2-(4-Bromo-3-methylphenyl)tetrahydro-4,7-ethanothiopyrano[3,4-c]pyrrole-1,3,8(2H,4H)-trione (1C);

- (3 α ,4 α ,7 α ,7 α)-2-(4-Bromo-3-methylphenyl)tetrahydro-4,7-ethanthiopyrano[3,4-c]pyrrole-1,3,8(2H,4H)-trione 5,5-dioxide (2);
(3 α ,4 β ,7 β ,7 α)-2-(3-Chlorophenyl)hexahydro-4-methyl-4,7-epoxy-1H-isoindole-1,3(2H)-dione (3);
- 5 (3 α ,4 α ,7 α ,7 α)- and (3 α ,4 β ,7 β ,7 α)-4-[(Acetyloxy)methyl]-3 α ,4,7,7 α -tetrahydro-2-[3-(trifluoromethyl)phenyl]-4,7-epoxy-1H-isoindole-1,3(2H)-dione (4i & 4ii, respectively);
(3 α ,4 α ,7 α ,7 α)- and (3 α ,4 β ,7 β ,7 α)-4-[(Acetyloxy)methyl]-Hexahydro-2-[3-(trifluoromethyl)phenyl]-4,7-epoxy-1H-isoindole-1,3(2H)-dione (5i & 5ii,
- 10 respectively);
(3 α ,4 α ,7 α ,7 α)- and (3 α ,4 β ,7 β ,7 α)-3 α ,4,7,7 α -Tetrahydro-5-(hydroxymethyl)-2-[3-(trifluoromethyl)phenyl]-4,7-epoxy-1H-isoindole-1,3(2H)-dione (6i & 6ii, respectively);
(3 α ,4 α ,7 α ,7 α)-3 α ,4,7,7 α -Tetrahydro-5-(hydroxymethyl)-4-methyl-2-[3-
- 15 (trifluoromethyl)phenyl]-4,7-epoxy-1H-isoindole-1,3(2H)-dione (7);
(3 α ,4 β ,7 β ,7 α)-2-[3,5-Bis(trifluoromethyl)phenyl]hexahydro-4,7-epoxy-1H-isoindole-1,3(2H)-dione (8);
(3 α ,4 α ,7 α ,7 α)-2-(4-Bromophenyl)octahydro-1,3-dioxo-4,7-etheno-5H-pyrrolo[3,4-c]pyridine-5-carboxylic acid phenyl ester (9);
- 20 (3 α ,4 α ,7 α ,7 α)-2-(4-Bromophenyl)octahydro-1,3-dioxo-4,7-etheno-5H-pyrrolo[3,4-c]pyridine-5-carboxylic acid phenylmethyl ester (10);
(3 α ,4 α ,7 α ,7 α)-Hexahydro-2-[3-(trifluoromethyl)phenyl]-4,7-ethano-1H-pyrrolo[3,4-c]pyridine-1,3(2H)-dione trifluoroacetate (11);
(3 α ,4 α ,7 α ,7 α)-5-Acetylhexahydro-2-[3-(trifluoromethyl)phenyl]-4,7-ethano-
- 25 1H-pyrrolo[3,4-c]pyridine-1,3(2H)-dione (12);
(3 α ,4 α ,7 α ,7 α)-5-Benzoylhexahydro-2-[3-(trifluoromethyl)phenyl]-4,7-ethano-1H-pyrrolo[3,4-c]pyridine-1,3(2H)-dione (13);
(3 α ,4 α ,7 α ,7 α)-Hexahydro-5-methyl-2-[3-(trifluoromethyl)phenyl]-4,7-ethano-1H-pyrrolo[3,4-c]pyridine-1,3(2H)-dione (14);

- (3 α ,4 α ,7 α ,7 α)-Hexahydro-5-(phenylmethyl)-2-[3-(trifluoromethyl)phenyl]-4,7-ethano-1H-pyrrolo[3,4-c]pyridine-1,3(2H)-dione trifluoroacetate (15);
- (3 α ,4 α ,7 α ,7 α)-Hexahydro-5-propyl-2-[3-(trifluoromethyl)phenyl]-4,7-ethano-1H-pyrrolo[3,4-c]pyridine-1,3(2H)-dione trifluoroacetate (16);
- 5 (3 α ,4 α ,4 $\alpha\beta$,5 $\alpha\beta$,6 α ,6 α)-2-[4-Cyano-3-(trifluoromethyl)phenyl]decahydro-1,3-dioxo-4,6-(iminomethano)cycloprop[f]isoindole-7-carboxylic acid phenylmethyl ester (17);
- (3 α ,4 α ,4 $\alpha\beta$,5 $\alpha\beta$,6 α ,6 α)-4-[Decahydro-1,3-dioxo-4,6-(iminomethano)cycloprop[f]isoindol-2-yl]-2-(trifluoromethyl)benzonitrile (18);
- 10 (3 α ,4 α ,4 $\alpha\beta$,5 $\alpha\beta$,6 α ,6 α)-4-[Decahydro-7-methyl-1,3-dioxo-4,6-(iminomethano)cycloprop[f]isoindol-2-yl]-2-(trifluoromethyl)benzonitrile (19);
- (3 α ,4 β ,7 β ,7 α)-4-(Octahydro-4,7-dimethyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl)-2-(trifluoromethyl)benzonitrile (20B);
- (3 α ,4 β ,7 β ,7 α)-N-[4-[[2-[2-[4-Cyano-3-(trifluoromethyl)phenyl]octahydro-7-methyl-1,3-dioxo-4,7-epoxy-4H-isoindol-4-yl]ethyl]thio]phenyl]acetamide (21E);
- 15 (3 α ,4 β ,7 β ,7 α)-N-[4-[[2-[2-[4-Cyano-3-(trifluoromethyl)phenyl]octahydro-7-methyl-1,3-dioxo-4,7-epoxy-4H-isoindol-4-yl]ethyl]sulfinyl]phenyl]acetamide (22);
- 20 (3 α ,4 β ,7 β ,7 α)-N-[4-[[2-[2-[4-Cyano-3-(trifluoromethyl)phenyl]octahydro-7-methyl-1,3-dioxo-4,7-epoxy-4H-isoindol-4-yl]ethyl]sulfonyl]phenyl]acetamide (23);
- (3 α ,4 β ,7 β ,7 α)- and (3 α ,4 α ,7 α ,7 α)-N-[2-[2-[4-Cyano-3-(trifluoromethyl)phenyl]octahydro-7-methyl-1,3-dioxo-4,7-epoxy-4H-isoindol-4-yl]ethyl]benzenesulfonamide (24Ci & 24Cii, respectively);
- 25 (3 α ,4 β ,7 β ,7 α)-4-[Octahydro-4-(2-hydroxyethyl)-7-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-2-(trifluoromethyl)benzonitrile (25B);
- (3 α ,4 α ,7 α ,7 α)- and (3 α ,4 β ,7 β ,7 α)-N-[4-[2-[2-[4-Cyano-3-(trifluoromethyl)phenyl]octahydro-7-methyl-1,3-dioxo-4,7-epoxy-4H-isoindol-4-yl]ethoxy]phenyl]acetamide (26Ci & 26Cii, respectively);
- 30

- (3 α ,4 α ,7 α ,7 α)-Hexahydro-2-(2-naphthalenyl)-4,7-epoxy-1H-isoindole-1,3(2H)-dione (27D);
- (1 α ,2 β ,2 α ,5 α ,6 β ,6 α)-Hexahydro-4-(2-naphthalenyl)-2,6-epoxy-3H-oxireno[f]isoindole-3,5(4H)-dione (28B);
- 5 (3 α ,4 α ,7 α ,7 α)-2-[4-Bromo-3-(trifluoromethyl)phenyl]-3 α ,4,7,7 α -tetrahydro-4,7-dimethyl-4,7-epithio-1H-isoindole-1,3(2H)-dione 8-oxide (29);
- (3 α ,4 α ,7 α ,7 α)-2-[4-Bromo-3-(trifluoromethyl)phenyl]-3 α ,4,7,7 α -tetrahydro-4,7-epithio-1H-isoindole-1,3(2H)-dione 8-oxide (30);
- (3 α ,4 α ,7 α ,7 α)-Hexahydro-2-[3-(trifluoromethyl)phenyl]-4,7-imino-1H-isoindole-1,3(2H)-dione (31D);
- 10 (3 α ,4 β ,7 β ,7 α)- and (3 α ,4 α ,7 α ,7 α)-3 α ,4,7,7 α -Tetrahydro-4,7-dimethyl-2-[3-(trifluoromethyl)phenyl]-4,7-epoxy-1H-isoindole-1,3(2H)-dione (32i & 32ii, respectively);
- (3 α ,4 α ,7 α ,7 α)-Hexahydro-4,7-dimethyl-2-[3-(trifluoromethyl)phenyl]-4,7-epoxy-1H-isoindole-1,3(2H)-dione (33);
- 15 (3 α ,4 α ,7 α ,7 α)-Tetrahydro-5-methyl-2-(4-nitro-1-naphthalenyl)-4,7-etheno-1H-pyrrolo[3,4-c]pyridine-1,3,6(2H,5H)-trione (34B);
- (3 α ,4 β ,7 β ,7 α)-4-[4-[2-(4-Fluorophenoxy)ethyl]octahydro-7-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-2-(trifluoromethyl)benzonitrile (35);
- 20 (3 α ,4 β ,7 β ,7 α)-4-[4-(2-Bromoethyl)octahydro-7-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-2-(trifluoromethyl)benzonitrile (36);
- (3 α ,4 β ,7 β ,7 α)-Hexahydro-4,7-dimethyl-2-(3-methyl-4-nitrophenyl)-4,7-epoxy-1H-isoindole-1,3(2H)-dione (37);
- (3 α ,4 β ,7 β ,7 α)-2-(2-Fluorenyl)hexahydro-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- 25 (3 α ,4 β ,7 β ,7 α)-2-[3-Chloro-4-(4-morpholinyl)phenyl]hexahydro-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- (3 α ,4 β ,7 β ,7 α)-2-(2,3-Dihydro-1H-inden-5-yl)hexahydro-4,7-epoxy-1H-isoindole-1,3(2H)-dione;

- (3 α ,4 β ,7 β ,7 α)-2-(4-Bromo-1-naphthalenyl)hexahydro-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- (3 α ,4 β ,7 β ,7 α)-2-(4-Chloro-1-naphthalenyl)hexahydro-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- 5 (3 α ,4 β ,7 β ,7 α)-2-(5-Amino-1-naphthalenyl)hexahydro-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- 3 α ,4 β ,7 β ,7 α)-Hexahydro-2-(7-hydroxy-1-naphthalenyl)-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- (3 α ,4 β ,7 β ,7 α)-Hexahydro-2-(4-nitro-1-naphthalenyl)-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- 10 (3 α ,4 β ,7 β ,7 α)-Hexahydro-2-(1H-indol-5-yl)-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- (3 α ,4 β ,7 β ,7 α)-Hexahydro-2-(1H-indazol-6-yl)-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- 15 (3 α ,4 β ,7 β ,7 α)-2-(1,3-Benzodioxol-5-yl)hexahydro-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- (3 α ,4 β ,7 β ,7 α)-2-[4-Amino-3-(trifluoromethyl)phenyl]hexahydro-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- (3 α ,4 β ,7 β ,7 α)-2-(3-Chloro-4-iodophenyl)hexahydro-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- 20 (3 α ,4 β ,7 β ,7 α)-Hexahydro-2-(8-quinoliny)-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- (3 α ,4 β ,7 β ,7 α)-2-(2,3-Dihydro-1,4-benzodioxin-6-yl)hexahydro-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- 25 (3 α ,4 β ,7 β ,7 α)-Hexahydro-2-[2-oxo-4-(trifluoromethyl)-2H-1-benzopyran-7-yl]-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- (3 α ,4 β ,7 β ,7 α)-Hexahydro-2-(4-methyl-2-oxo-2H-1-benzopyran-7-yl)-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- (3 α ,4 β ,7 β ,7 α)-2-(2,5-Dimethoxy-4-nitrophenyl)hexahydro-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- 30

- (3 α ,4 β ,7 β ,7 α)-2,3,5,6-Tetrafluoro-4-(octahydro-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl)benzonitrile;
- (3 α ,4 β ,7 β ,7 α)-Hexahydro-2-(2,4,5-trifluorophenyl)-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- 5 (3 α ,4 β ,7 β ,7 α)-Hexahydro-2-(2,4,5-trichlorophenyl)-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- (3 α ,4 β ,7 β ,7 α)-2-(2-Amino-4,5-dichlorophenyl)hexahydro-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- (3 α ,4 β ,7 β ,7 α)-2-(3,4-Difluorophenyl)hexahydro-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- 10 (3 α ,4 β ,7 β ,7 α)-1-Acetyl-2,3-dihydro-6-(octahydro-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl)-1H-indole;
- (3 α ,4 β ,7 β ,7 α)-2-(3-Chloro-4-fluorophenyl)hexahydro-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- 15 (3 α ,4 β ,7 β ,7 α)-2-(3,4-Dichlorophenyl)hexahydro-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- (3 α ,4 β ,7 β ,7 α)-Hexahydro-2-(3,4,5-trichlorophenyl)-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- (3 α ,4 β ,7 β ,7 α)-2-(3-Chloro-4-methoxyphenyl)hexahydro-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- 20 (3 α ,4 β ,7 β ,7 α)-2-(3-Chloro-4-methylphenyl)hexahydro-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- (3 α ,4 β ,7 β ,7 α)-Hexahydro-2-(2-methyl-1-naphthalenyl)-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- 25 (3 α ,4 β ,7 β ,7 α)-2-(4-Chloro-3-methylphenyl)hexahydro-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- (3 α ,4 β ,7 β ,7 α)-2-(3,4-Dimethylphenyl)hexahydro-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- (3 α ,4 β ,7 β ,7 α)-2-[4-Bromo-3-(trifluoromethyl)phenyl]hexahydro-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- 30

- (3 α ,4 β ,7 β ,7 α)-2-(4-Bromo-3-methylphenyl)hexahydro-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- (3 α ,4 β ,7 β ,7 α)-2-(4-Fluoro-3-nitrophenyl)hexahydro-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- 5 (3 α ,4 β ,7 β ,7 α)-2-[4-Fluoro-3-(trifluoromethyl)phenyl]hexahydro-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- (3 α ,4 β ,7 β ,7 α)-2-(4-Chloro-3-nitrophenyl)hexahydro-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- (3 α ,4 β ,7 β ,7 α)-2-[4-Chloro-3-(trifluoromethyl)phenyl]hexahydro-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- 10 (3 α ,4 β ,7 β ,7 α)-2-(4-Chloro-2-methoxy-5-methylphenyl)hexahydro-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- (3 α ,4 β ,7 β ,7 α)-2-(4-Amino-3-nitrophenyl)hexahydro-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- 15 (3 α ,4 β ,7 β ,7 α)-Hexahydro-2-(4-methyl-3-nitrophenyl)-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- (3 α ,4 β ,7 β ,7 α)-2-(3,4-Dimethoxyphenyl)hexahydro-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- (3 α ,4 β ,7 β ,7 α)-Hexahydro-2-(3-hydroxy-4-methoxyphenyl)-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- 20 (3 α ,4 β ,7 β ,7 α)-Hexahydro-2-(4-methyl-5-nitro-2-pyridinyl)-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- (3 α ,4 β ,7 β ,7 α)-2-Chloro-4-(octahydro-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl)- α -phenylbenzeneacetonitrile;
- 25 (3 α ,4 β ,7 β ,7 α)-Hexahydro-2-(2-methoxy-3-dibenzofuranyl)-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- (3 α ,4 β ,7 β ,7 α)-Hexahydro-2-(2,3,4-trifluorophenyl)-4,7-epoxy-1H-isoindole-1,3(2H)-dione;

- (3α,4β,7β,7α)-2-(2,3-Dihydro-2-methyl-1,3-dioxo-1H-isoindol-5-yl)hexahydro-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
(3α,4β,7β,7α)-2-(4-Bromo-2,3,5,6-tetrafluorophenyl)hexahydro-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- 5 (3α,4β,7β,7α)-Hexahydro-2-(2-hydroxy-1-naphthalenyl)-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
(3α,4β,7β,7α)-2-[2,5-Dichloro-4-(1H-pyrrol-1-yl)phenyl]hexahydro-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
(3α,4β,7β,7α)-Hexahydro-2-[4-(methoxymethyl)-2-oxo-2H-1-benzopyran-7-yl]-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- 10 (3α,4β,7β,7α)-2-(6-Benzothiazolyl)hexahydro-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
(3α,4β,7β,7α)-2-Methoxy-4-(octahydro-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl)benzoic acid methyl ester;
- 15 (3α,4β,7β,7α)-2-Methyl-5-(octahydro-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl)benzonitrile;
(3α,4β,7β,7α)-Hexahydro-2-(2-oxo-2H-1-benzopyran-6-yl)-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
(3α,4β,7β,7α)-Hexahydro-2-(2,3,5,6-tetramethyl-4-nitrophenyl)-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- 20 (3α,4β,7β,7α)-Hexahydro-2-(2,4,5-trimethylphenyl)-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
(3α,4β,7β,7α)-2-(4-Fluoro-3-methylphenyl)hexahydro-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- 25 (3α,4β,7β,7α)-Hexahydro-2-(3-methoxy-4-methylphenyl)-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
(3α,4β,7β,7α)-N-Ethyl-2-methyl-5-(octahydro-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl)-N-phenylbenzenesulfonamide;
(3α,4β,7β,7α)-2,6-Dibromo-4-(octahydro-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl)benzenesulfonamide;
- 30

- (3 α ,4 β ,7 β ,7 α)-2,4-Dimethyl-6-(octahydro-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl)-3-pyridinecarbonitrile;
(3 α ,4 β ,7 β ,7 α)-2-(2,3-Dimethyl-1H-indol-5-yl)hexahydro-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
5 (3 α ,4 β ,7 β ,7 α)-2-(3-Dibenzofuranyl)hexahydro-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
(3 α ,4 β ,7 β ,7 α)-Hexahydro-2-(2'-hydroxy[1,1':3',1''-terphenyl]-5'-yl)-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
(3 α ,4 β ,7 β ,7 α)-Hexahydro-2-(5,6,7,8-tetrahydro-3-hydroxy-2-naphthalenyl)-
10 4,7-epoxy-1H-isoindole-1,3(2H)-dione;
(3 α ,4 β ,7 β ,7 α)-2-(2,3-Dihydro-1H-indol-6-yl)hexahydro-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
(3 α ,4 β ,7 β ,7 α)-2-(1,3-Dihydro-2,2-dioxidobenzo[c]thiophen-5-yl)hexahydro-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
15 (3 α ,4 β ,7 β ,7 α)-Hexahydro-2-(2-hydroxy-4,5-dimethylphenyl)-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
(3 α ,4 β ,7 β ,7 α)-2-(2,3-Dihydro-2,2,3,3-tetrafluoro-1,4-benzodioxin-6-yl)hexahydro-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
(3 α ,4 β ,7 β ,7 α)-Hexahydro-2-(1H-indazol-5-yl)-4,7-epoxy-1H-isoindole-
20 1,3(2H)-dione;
(3 α ,4 β ,7 β ,7 α)-2-(4-Amino-2,3,5,6-tetrafluorophenyl)hexahydro-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
(3 α ,4 β ,7 β ,7 α)-2-(4-Bromo-3-chlorophenyl)hexahydro-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
25 (3 α ,4 β ,7 β ,7 α)-Hexahydro-2-(5-hydroxy-1-naphthalenyl)-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
(3 α ,4 β ,7 β ,7 α)-4-(Octahydro-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl)-2-(trifluoromethyl)benzonitrile;
(3 α ,4 β ,7 β ,7 α)-2-(4-Morpholinyl)-5-(octahydro-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl)benzoic acid methyl ester;
30

- (3 α ,4 β ,7 β ,7 α)-2-Fluoro-5-(octahydro-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl)benzonitrile;
- (3 α ,4 β ,7 β ,7 α)-Hexahydro-2-(2-naphthalenyl)-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- 5 (3 α ,4 β ,7 β ,7 α)-2-(9-Ethyl-9H-carbazol-3-yl)hexahydro-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- (3 α ,4 β ,7 β ,7 α)-2-[1,2-Dihydro-8-methyl-2-oxo-4-(trifluoromethyl)-7-quinoliny]hexahydro-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- (3 α ,4 α ,7 α ,7 α)-Hexahydro-2-[3-(trifluoromethyl)phenyl]-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- 10 (3 α ,4 α ,7 α ,7 α)-Hexahydro-2-(4-nitro-1-naphthalenyl)-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- (3 α ,4 β ,7 β ,7 α)-2-(4-Bromo-3-methylphenyl)-3a,4,7,7a-tetrahydro-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- 15 (3 α ,4 β ,7 β ,7 α)-3a,4,7,7a-Tetrahydro-2-(2-naphthalenyl)-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- (3 α ,4 β ,7 β ,7 α)-2-(9-Ethyl-9H-carbazol-3-yl)-3a,4,7,7a-tetrahydro-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- (3 α ,4 β ,7 β ,7 α)-2-[4-Fluoro-3-(trifluoromethyl)phenyl]-3a,4,7,7a-tetrahydro-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- 20 (3 α ,4 β ,7 β ,7 α)-2-[1,2-Dihydro-8-methyl-2-oxo-4-(trifluoromethyl)-7-quinoliny]-3a,4,7,7a-tetrahydro-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- (3 α ,4 α ,7 α ,7 α)-4-[(Acetyloxy)methyl]-2-(4-bromo-3-methylphenyl)-3a,4,7,7a-tetrahydro-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- 25 (3 α ,4 β ,7 β ,7 α)-4-[(Acetyloxy)methyl]-2-(4-bromo-3-methylphenyl)-3a,4,7,7a-tetrahydro-4,7-epoxy-1H-isoindole-1,3(2H)-dione.;
- (3 α ,4 β ,7 β ,7 α)-Hexahydro-4,7-dimethyl-2-[3-(trifluoromethyl)phenyl]-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- (3 α ,4 β ,7 β ,7 α)-4-(Octahydro-4,7-dimethyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl)-1-naphthalenecarbonitrile;
- 30

- (3 α ,4 β ,7 β ,7 α)-(Benzo[b]thiophen-3-yl)hexahydro-4,7-dimethyl-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- (3 α ,4 β ,7 β ,7 α)-Hexahydro-4,7-dimethyl-2-[4-nitro-3-(trifluoromethyl)phenyl]-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- 5 (3 α ,4 β ,7 β ,7 α)-4-(1,3,3a,4,7,7a-Hexahydro-4,7-dimethyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl)-1-naphthalenecarbonitrile;
- (3 α ,4 α ,7 α ,7 α)-Hexahydro-4-methyl-2-(2-naphthalenyl)-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- (3 α ,4 β ,7 β ,7 α)-2-(4-Bromo-3-methylphenyl)hexahydro-4-methyl-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- 10 (3 α ,4 β ,7 β ,7 α)-Hexahydro-4-methyl-2-[3-(trifluoromethyl)phenyl]-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- (3 α ,4 β ,7 β ,7 α)-2-(3,5-Dichlorophenyl)hexahydro-4-methyl-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- 15 (3 α ,4 β ,7 β ,7 α)-2-(3-Chloro-4-fluorophenyl)hexahydro-4-methyl-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- (3 α ,4 β ,7 β ,7 α)-2-Methoxy-4-(octahydro-1,3-dioxo-4-methyl-4,7-epoxy-2H-isoindol-2-yl)-1-naphthalenecarbonitrile;
- (3 α ,4 β ,7 β ,7 α)-Hexahydro-4-methyl-2-[4-nitro-3-(trifluoromethyl)phenyl]-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- 20 (3 α ,4 β ,7 β ,7 α)-Hexahydro-2-[4-(1H-imidazol-1-yl)phenyl]-4-methyl-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- (3 α ,4 β ,7 β ,7 α)-2-[3-Chloro-4-(2-thiazolyl)phenyl]hexahydro-4-methyl-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- 25 (3 α ,4 α ,7 α ,7 α)-2-(3,5-Dichlorophenyl)hexahydro-4,7-imino-1H-isoindole-1,3(2H)-dione;
- (3 α ,4 α ,7 α ,7 α)-2-(4-Bromo-1-naphthalenyl)hexahydro-4,7-imino-1H-isoindole-1,3(2H)-dione;
- (3 α ,4 α ,7 α ,7 α)-2-(4-Bromo-3-methylphenyl)hexahydro-4,7-imino-1H-isoindole-1,3(2H)-dione;
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- (3 α ,4 α ,7 α ,7 α)-Hexahydro-2-(4-nitro-1-naphthalenyl)-4,7-imino-1H-isoindole-1,3(2H)-dione;
- (3 α ,4 α ,7 α ,7 α)-8-Acetyl-2-(3,5-dichlorophenyl)hexahydro-4,7-imino-1H-isoindole-1,3(2H)-dione;
- 5 (3 α ,4 α ,7 α ,7 α)-Octahydro-1,3-dioxo-2-[3-(trifluoromethyl)phenyl]-4,7-ethano-5H-pyrrolo[3,4-c]pyridine-5-carboxylic acid phenyl ester;
- (3 α ,4 α ,7 α ,7 α)-4-(Octahydro-1,3-dioxo-4,7-ethano-2H-pyrrolo[3,4-c]pyridin-2-yl)-1-naphthalenecarbonitrile;
- (3 α ,4 α ,7 α ,7 α)-4-(Octahydro-5-methyl-1,3-dioxo-4,7-ethano-2H-pyrrolo[3,4-c]pyridin-2-yl)-1-naphthalenecarbonitrile;
- 10 (3 α ,4 α ,7 α ,7 α)-2-(4-Cyano-1-naphthalenyl)octahydro-1,3-dioxo-4,7-etheno-5H-pyrrolo[3,4-c]pyridine-5-carboxylic acid phenylmethyl ester;
- (3 α ,4 α ,7 α ,7 α)-4-(Octahydro-1,3-dioxo-4,7-ethano-2H-pyrrolo[3,4-c]pyridin-2-yl)-2-(trifluoromethyl)benzonitrile;
- 15 (3 α ,4 α ,7 α ,7 α)-4-(Octahydro-5-methyl-1,3-dioxo-4,7-ethano-2H-pyrrolo[3,4-c]pyridin-2-yl)-2-(trifluoromethyl)benzonitrile;
- (3 α ,4 α ,7 α ,7 α)-2-[4-Cyano-3-(trifluoromethyl)phenyl]octahydro-1,3-dioxo-4,7-etheno-5H-pyrrolo[3,4-c]pyridine-5-carboxylic acid phenylmethyl ester;
- (3 α ,4 α ,7 α ,7 α)-2-[4-Bromo-3-(trifluoromethyl)phenyl]tetrahydro-5-methyl-
- 20 4,7-etheno-1H-pyrrolo[3,4-c]pyridine-1,3,6(2H,5H)-trione;
- (3 α ,4 α ,7 α ,7 α)-Tetrahydro-5-methyl-2-[3-(trifluoromethyl)phenyl]-4,7-etheno-1H-pyrrolo[3,4-c]pyridine-1,3,6(2H,5H)-trione;
- (3 α ,4 α ,7 α ,7 α)-Tetrahydro-5-methyl-2-(2-naphthalenyl)-4,7-etheno-1H-pyrrolo[3,4-c]pyridine-1,3,6(2H,5H)-trione;
- 25 (1 α ,2 β ,2 α ,5 α ,6 β ,6 α)-Hexahydro-4-[3-(trifluoromethyl)phenyl]-2,6-epoxy-3H-oxireno[f]isoindole-3,5(4H)-dione;
- (1 α ,2 β ,2 α ,5 α ,6 β ,6 α)-4-(3,5-Dichlorophenyl)hexahydro-2,6-epoxy-3H-oxireno[f]isoindole-3,5(4H)-dione;
- (1 α ,2 β ,2 α ,5 α ,6 β ,6 α)-Hexahydro-4-(4-nitro-1-naphthalenyl)-2,6-epoxy-
- 30 3H-oxireno[f]isoindole-3,5(4H)-dione;

- (1 α ,2 β ,2 α ,5 α ,6 β ,6 α)-4-(3,4-Dichlorophenyl)hexahydro-2,6-epoxy-3H-oxireno[f]isoindole-3,5(4H)-dione;
2-[4-(4-Bromophenoxy)phenyl]-3a,4,7,7a-tetrahydro-4,7-dimethyl-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- 5 3a,4,7,7a-Tetrahydro-2-(2-methoxyphenyl)-4,7-dimethyl-4,7-epoxy-1H-isoindole-1,3(2H)-;
[(1,2,3,3a,7,7a-Hexahydro-2-phenyl-4,7-epoxy-4H-isoindol-4-yl)methyl]carbamic acid (3,5-dimethoxyphenyl)methyl ester;
2-(2,4-Dimethylphenyl)-3a,4,7,7a-tetrahydro-4-(hydroxymethyl)-4,7-epoxy-1H-
- 10 isoindole-1,3(2H)-dione;
2-(1,3-Benzodioxol-5-yl)-3a,4,7,7a-tetrahydro-4-methyl-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
4-[Bis(acetyloxy)methyl]-2-(3-bromophenyl)-3a,4,7,7a-tetrahydro-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- 15 N-[[1,2,3,3a,7,7a-Hexahydro-2-(2,4,6-trimethylphenyl)-4,7-epoxy-4H-isoindol-4-yl]methyl]-2,2-dimethylpropanamide;
3a,4,7,7a-Tetrahydro-4-(hydroxymethyl)-2-[2-(trifluoromethyl)phenyl]-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
3a,4,7,7a-Tetrahydro-4-(hydroxymethyl)-2-(1-naphthalenyl)-4,7-epoxy-1H-
- 20 isoindole-1,3(2H)-dione;
2-Chloro-5-(1,3,3a,4,7,7a-hexahydro-4,7-dimethyl-4,7-epoxy-2H-isoindol-2-yl)benzoic acid methyl ester;
4-[Bis(acetyloxy)methyl]-2-(4-bromo-2-nitrophenyl)-3a,4,7,7a-tetrahydro-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- 25 3a,4,7,7a-Tetrahydro-4-methyl-2-(4-methyl-3-nitrophenyl)-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
2-[2-Chloro-5-(trifluoromethyl)phenyl]-3a,4,7,7a-tetrahydro-4-methyl-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
2-[4-Chloro-3-(trifluoromethyl)phenyl]-3a,4,7,7a-tetrahydro-4,7-dimethyl-4,7-
- 30 epoxy-1H-isoindole-1,3(2H)-dione;
2-(1,3,3a,4,7,7a-Hexahydro-4-methyl-4,7-epoxy-2H-isoindol-2-yl)benzonitrile;

- 2-(4-Fluorophenyl)-3a,4,7,7a-tetrahydro-4-methyl-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
2,2,2-Trifluoro-N-[(1,2,3,3a,7,7a-hexahydro-2-phenyl-4,7-epoxy-4H-isoindol-4-yl)methyl]acetamide;
- 5 3a,4,7,7a-Tetrahydro-4,7-dimethyl-2-(4-methyl-3-nitrophenyl)-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
2-Chloro-5-[1,3,3a,4,7,7a-hexahydro-4-(hydroxymethyl)-4,7-epoxy-2H-isoindol-2-yl]benzoic acid;
3a,4,7,7a-Tetrahydro-4,7-dimethyl-2-(4-nitrophenyl)-4,7-epoxy-1H-isoindole-
- 10 1,3(2H)-dione;
3a,4,7,7a-Tetrahydro-2-(2-mercaptophenyl)-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
3a,4,7,7a-Tetrahydro-2-[2-[(phenylmethyl)thio]phenyl]-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- 15 [[2-(4-Chlorophenyl)-1,2,3,3a,7,7a-hexahydro-4,7-epoxy-4H-isoindol-4-yl)methyl]carbamic acid 2-methylpropyl ester;
4-(1,1-Dimethylethyl)-N-[[1,2,3,3a,7,7a-hexahydro-2-(4-methylphenyl)-4,7-epoxy-4H-isoindol-4-yl)methyl]benzamide;
2,4-Dichloro-N-[[1,2,3,3a,7,7a-hexahydro-2-(4-nitrophenyl)-4,7-epoxy-4H-isoindol-4-yl)methyl]benzamide;
- 20 N-[[2-(4-Chlorophenyl)-1,2,3,3a,7,7a-hexahydro-4,7-epoxy-4H-isoindol-4-yl)methyl]-2,4,6-trimethylbenzenesulfonamide;
[[1,2,3,3a,7,7a-Hexahydro-2-phenyl-4,7-epoxy-4H-isoindol-4-yl)methyl]carbamic acid 1,1-dimethylethyl ester;
- 25 N-[[1,2,3,3a,7,7a-Hexahydro-2-phenyl-4,7-epoxy-4H-isoindol-4-yl)methyl]-2-phenoxyacetamide;
N-[[1,2,3,3a,7,7a-Hexahydro-2-(4-nitrophenyl)-4,7-epoxy-4H-isoindol-4-yl)methyl]-2,2-dimethylpropanamide;
2-(2,4-Dichlorophenoxy)-N-[[1,2,3,3a,7,7a-hexahydro-2-(4-nitrophenyl)-4,7-epoxy-4H-isoindol-4-yl)methyl]acetamide;
- 30

- N-[[1,2,3,3a,7,7a-Hexahydro-2-(4-methylphenyl)-4,7-epoxy-4H-isoindol-4-yl]methyl]-3,5-dimethoxybenzamide;
N-[[2-(4-Chlorophenyl)-1,2,3,3a,7,7a-hexahydro-4,7-epoxy-4H-isoindol-4-yl]methyl]-2-nitrobenzenesulfonamide;
- 5 (3 α ,4 β ,7 β ,7 α)-Hexahydro-2-[(1S)-1-phenylethyl]-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
(3 α ,4 β ,7 β ,7 α)-Hexahydro-2-[(1S)-2-hydroxy-1-phenylethyl]-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
(3 α ,4 β ,7 β ,7 α)-2-[(1S)-2-(Acetyloxy)-1-phenylethyl]-3a,4,7,7a-tetrahydro-
- 10 4,7-epoxy-1H-isoindole-1,3(2H)-dione;
(3 α ,4 α ,7 α ,7 α)-3a,4,7,7a-Tetrahydro-2-[(1S)-1-phenylethyl]-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
(3 α ,4 β ,7 β ,7 α)-Hexahydro-2-[(1R)-1-phenylethyl]-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- 15 (3 α ,4 β ,7 β ,7 α)-4-[[[(Octahydro-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl)methyl]amino]benzoic acid;
(3 α ,4 β ,7 β ,7 α)-Hexahydro-2-(4-morpholinylmethyl)-4,7-epoxy-1H-isoindole-1,3(2H)-dione
(3 α ,4 β ,7 β ,7 α)-4-[Octahydro-4-(2-hydroxyethyl)-7-methyl-1,3-dioxo-4,7-epoxy-
- 20 2H-isoindol-2-yl]-2-(trifluoromethyl)benzonitrile;
(3 α ,4 β ,7 β ,7 α)- and (3 α ,4 α ,7 α ,7 α)-4-[Octahydro-4-methyl-1,3-dioxo-7-(phenylmethyl)-4,7-epoxy-2H-isoindol-2-yl]-2-(trifluoromethyl)benzonitrile;
(3 α ,4 β ,7 β ,7 α)-(4-[7-[2-(4-Bromophenoxy)ethyl]octahydro-4-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-2-(trifluoromethyl)benzonitrile;
- 25 (3 α ,4 β ,7 β ,7 α)-4-[Octahydro-7-[2-(4-Iodophenoxy)ethyl]-4-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-2-(trifluoromethyl)benzonitrile;
(3 α ,4 β ,7 β ,7 α)-4-[Octahydro-4-methyl-1,3-dioxo-7-[2-[4-(trifluoromethyl)phenoxy]ethyl]-4,7-epoxy-2H-isoindol-2-yl]-2-(trifluoromethyl)benzonitrile;

- (3 α ,4 β ,7 β ,7 α)-4-[Octahydro-7-[2-(4-methoxyphenoxy)ethyl]-4-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-2-(trifluoromethyl)benzonitrile;
(3 α ,4 β ,7 β ,7 α)-4-[7-[2-(4-Ethoxyphenoxy)ethyl]octahydro-4-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-2-(trifluoromethyl)benzonitrile;
- 5 (3 α ,4 β ,7 β ,7 α)-4-[7-[2-(4-Chlorophenoxy)ethyl]octahydro-4-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-2-(trifluoromethyl)benzonitrile;
(3 α ,4 β ,7 β ,7 α)-4-[2-[2-(4-Cyano-3-(trifluoromethyl)phenyl)octahydro-7-methyl-1,3-dioxo-4,7-epoxy-4H-isoindol-4-yl]ethoxy]benzoic acid, methyl ester;
- 10 (3 α ,4 β ,7 β ,7 α)-Hexahydro-4-(2-hydroxyethyl)-7-methyl-2-(3-methyl-4-nitrophenyl)-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
(3 α ,4 β ,7 β ,7 α)-4-[Octahydro-4-methyl-1,3-dioxo-7-[2-[4-(trifluoromethoxy)phenoxy]ethyl]-4,7-epoxy-2H-isoindol-2-yl]-2-(trifluoromethyl)benzonitrile;
- 15 (3 α ,4 β ,7 β ,7 α)-2-(3,5-Dichlorophenyl)hexahydro-4,7-dimethyl-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
(3 α ,4 β ,7 β ,7 α)-Hexahydro-4,7-dimethyl-2-(4-nitro-1-naphthalenyl)-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
(3 α ,4 β ,7 β ,7 α)-2-[4-Cyano-3-(trifluoromethyl)phenyl]octahydro-7-methyl-1,3-
- 20 dioxo-4,7-epoxy-4H-isoindole-4-propanenitrile;
(3 α ,4 β ,7 β ,7 α)-4-[Octahydro-4-methyl-7-[2-(4-morpholinyl)ethyl]-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-2-(trifluoromethyl)benzonitrile, trifluoroacetate;
(3 α ,4 β ,7 β ,7 α)-2-(5-Fluoro-1-naphthalenyl)hexahydro-4,7-dimethyl-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- 25 (3 α ,4 β ,7 β ,7 α)-2-(5-Fluoro-4-nitro-1-naphthalenyl)hexahydro-4,7-dimethyl-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
(3 α ,4 β ,7 β ,7 α)-2-(1,1-Dioxidobenzo[b]thiophen-3-yl)hexahydro-4,7-dimethyl-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
4-(1,3,3a,4,7,7a-Hexahydro-4,6,7-trimethyl-1,3-dioxo-4,7-epoxy-2H-
- 30 pyrrolo[3,4-c]pyridin-2-yl)-2-(trifluoromethyl)benzonitrile;

- (3 α ,4 β ,7 β ,7 α)-Tetrahydro-4,7-dimethyl-2-[3-(trifluoromethyl)phenyl]-4,7-epoxy-1H-isoindole-1,3,5(2H,4H)-trione;
(3 α ,4 α ,7 α ,7 α)-Tetrahydro-4,7-dimethyl-2-[3-(trifluoromethyl)phenyl]-4,7-epoxy-1H-isoindole-1,3,5(2H,4H)-trione;
- 5 (3 α ,4 β ,7 β ,7 α)-2-(5-Chloro-1-naphthalenyl)hexahydro-4,7-dimethyl-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
(3 α ,4 β ,7 β ,7 α)-2-(5-Chloro-4-nitro-1-naphthalenyl)hexahydro-4,7-dimethyl-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
(3 α ,4 β ,7 β ,7 α)-4-Ethylhexahydro-7-methyl-2-(4-nitro-1-naphthalenyl)-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- 10 (3 α ,4 β ,7 β ,7 α)-2-(4-Cyano-1-naphthalenyl)-N-(4-fluorophenyl)octahydro-7-methyl-1,3-dioxo-4,7-epoxy-4H-isoindole-4-acetamide;
(3 α ,4 β ,7 β ,7 α)-Hexahydro-4-methyl-2-(2-naphthalenyl)-4,7-epoxy-1H-isoindole-1,3(2H)-dione, faster eluting enantiomer;
- 15 (3 α ,4 β ,7 β ,7 α)-Hexahydro-4-methyl-2-(2-naphthalenyl)-4,7-epoxy-1H-isoindole-1,3(2H)-dione, slower eluting enantiomer;
(3 α ,4 β ,7 β ,7 α)-4-[4-[2-[(4-Fluorophenyl)methyl]methylamino]ethyl]octahydro-7-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-2-(trifluoromethyl)benzonitrile;
- 20 (3 α ,4 β ,5 β ,6 β ,7 β ,7 α)-4-(Octahydro-4,5,6,7-tetramethyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl)-2-(trifluoromethyl)benzonitrile;
(3 α ,4 β ,7 β ,7 α)-4-[Octahydro-4-methyl-1,3-dioxo-7-[2-[4-(trifluoromethyl)phenoxy]ethyl]-4,7-epoxy-2H-isoindol-2-yl]-2-(trifluoromethyl)benzonitrile, faster eluting antipode;
- 25 (3 α ,4 β ,7 β ,7 α)-4-[Octahydro-4-methyl-1,3-dioxo-7-[2-[4-(trifluoromethyl)phenoxy]ethyl]-4,7-epoxy-2H-isoindol-2-yl]-2-(trifluoromethyl)benzonitrile, slower eluting enantiomer;
(3 α ,4 β ,5 β ,7 β ,7 α)-4-(Octahydro-5-hydroxy-4,7-dimethyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl)-2-(trifluoromethyl)benzonitrile;

- (3 α ,4 β ,5 α ,7 β ,7 α)-4-(Octahydro-5-hydroxy-4,7-dimethyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl)-2-(trifluoromethyl)benzonitrile;
(α R)- α -Methoxybenzeneacetic acid, 2-[(3 α ,4 β ,7 β ,7 α)-2-(4-cyano-1-naphthalenyl)octahydro-7-methyl-1,3-dioxo-4,7-epoxy-4H-isoindol-4-y]ethyl ester;
- 5 (3 α ,4 β ,7 β ,7 α)-2-(Methylthio)-4-(octahydro-4,7-dimethyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl)benzonitrile;
(3 α ,4 β ,7 β ,7 α)-2-(Methylsulfinyl)-4-(octahydro-4,7-dimethyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl)benzonitrile;
- 10 (3 α ,4 β ,7 β ,7 α)-2-(Methylsulfonyl)-4-(octahydro-4,7-dimethyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl)benzonitrile;
(3 α ,4 β ,5 β ,7 β ,7 α)-7-[2-[(1,1-Dimethylethyl)dimethylsilyloxy]ethyl]hexahydro-5-hydroxy-4-methyl-2-(4-nitro-1-naphthalenyl)-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- 15 (3 α ,4 β ,5 β ,7 β ,7 α)-Hexahydro-5-hydroxy-7-(2-hydroxyethyl)-4-methyl-2-(4-nitro-1-naphthalenyl)-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
(3 α ,4 β ,5 β ,7 β ,7 α)-7-[2-(4-Fluorophenoxy)ethyl]hexahydro-5-hydroxy-4-methyl-2-(4-nitro-1-naphthalenyl)-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
(3 α ,4 β ,5 β ,6 β ,7 β ,7 α)-4-(Octahydro-5,6-dihydroxy-4,7-dimethyl-1,3-dioxo-
- 20 4,7-epoxy-2H-isoindol-2-yl)-2-(trifluoromethyl)benzonitrile;
(3 α ,4 β ,5 α ,6 α ,7 β ,7 α)-4-(Octahydro-5,6-dihydroxy-4,7-dimethyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl)-2-(trifluoromethyl)benzonitrile;
3 α ,4 β ,5 β ,6 β ,7 β ,7 α)-4-[Octahydro-5,6-dihydroxy-4-(hydroxyethyl)-7-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
- 25 (3 α ,4 β ,5 β ,6 β ,7 β ,7 α)-4-[Octahydro-5,6-dihydroxy-4-methyl-1,3-dioxo-7-[2-[4-(trifluoromethyl)phenoxy]ethyl]-4,7-epoxy-2H-isoindol-2-yl]-2-(trifluoromethyl)benzonitrile;
(3 α ,4 β ,5 β ,5 α ,8 α ,8 β)-4-(Decahydro-5-hydroxy-4-methyl-1,3-dioxo-4,8a-epoxy-2H-furo[3,2-e]isoindol-2-yl)-1-naphthalenecarbonitrile;

- (3 α ,4 β ,7 β ,7 α)-2-(4-Cyano-1-naphthalenyl)octahydro-7-methyl-1,3-dioxo-4,7-epoxy-4H-isoindole-4-acetic acid;
(3 α ,4 β ,7 β ,7 α)-2-(4-Cyano-1-naphthalenyl)octahydro-7-methyl-1,3-dioxo-4,7-epoxy-4H-isoindole-4-acetic acid, methyl ester;
- 5 (3 α ,4 β ,7 β ,7 α)-2-(4-Cyano-1-naphthalenyl)-N-[(4-fluorophenyl)methyl]octahydro-7-methyl-1,3-dioxo-4,7-epoxy-4H-isoindole-4-acetamide;
(3 α ,4 β ,7 β ,7 α)-N-[2-[2-(4-Cyano-1-naphthalenyl)octahydro-7-methyl-1,3-dioxo-4,7-epoxy-4H-isoindol-4-yl]ethyl]-4-fluorobenzamide;
- 10 [3aR-(3 α ,4 β ,7 β ,7 α)]-4-[Octahydro-4-(2-hydroxyethyl)-7-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
[3aS-(3 α ,4 β ,7 β ,7 α)]-4-[Octahydro-4-(2-hydroxyethyl)-7-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
[3aR-(3 α ,4 β ,7 β ,7 α)]-4-[4-[2-(3-Fluorophenoxy)ethyl]octahydro-7-methyl-
- 15 1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
[3aS-(3 α ,4 β ,7 β ,7 α)]-4-[4-[2-(3-Fluorophenoxy)ethyl]octahydro-7-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
(4-Fluorophenyl)carbamic acid, 2-[(3 α ,4 β ,7 β ,7 α)-2-(4-cyano-1-naphthalenyl)octahydro-7-methyl-1,3-dioxo-4,7-epoxy-4H-isoindol-4-yl]ethyl
- 20 ester;
(3 α ,4 β ,7 β ,7 α)-4-[Octahydro-4-(2-hydroxyethyl)-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
(3 α ,4 β ,6 β ,7 β ,7 α)-4-[2-(4-Cyanophenoxy)ethyl]octahydro-6-hydroxy-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
- 25 [3aS-(3 α ,4 β ,5 β ,7 β ,7 α)]-4-[Octahydro-5-hydroxy-7-(2-hydroxyethyl)-4-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
[3aR-(3 α ,4 β ,5 β ,7 β ,7 α)]-4-[Octahydro-5-hydroxy-7-(2-hydroxyethyl)-4-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
(3 α ,4 β ,7 β ,7 α)-4-[4-[2-(4-Cyanophenoxy)ethyl]-7-ethyl]octahydro-1,3-dioxo-
- 30 4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;

- (3 α ,4 β ,7 β ,7 α)-4-[2-(Acetyloxy)ethyl]-2-(4-cyano-1-naphthalenyl)hexahydro-7-methyl-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- (3 α ,4 β ,7 β ,7 α)-4-[Octahydro-4-methyl-1,3-dioxo-7-(2-oxoethyl)-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
- 5 [3 α ,4 β (E),7 β ,7 α]-4-[4-[3-(4-Cyanophenyl)-2-propenyl]octahydro-7-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
- [3 α ,4 β (Z),7 β ,7 α]-4-[4-[3-(4-Cyanophenyl)-2-propenyl]octahydro-7-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
- (3 α ,4 β ,7 β ,7 α)-4-[4-[3-(4-Cyanophenyl)propyl]octahydro-7-methyl-1,3-
- 10 dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
- (3 α ,4 β ,7 β ,7 α)-4-[4-[2-[(6-Chloro-1,2-benzisoxazol-3-yl)oxy]ethyl]octahydro-7-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
- (3 α ,4 β ,7 β ,7 α)-4-[Octahydro-4-methyl-7-[2-[(6-nitro-1H-indazol-3-yl)oxy]ethyl]-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
- 15 [3aS-(3 α ,4 β ,5 β ,7 β ,7 α)]-4-[7-[2-(1,2-Benzisoxazol-3-yloxy)ethyl]octahydro-5-hydroxy-4-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-
- naphthalenecarbonitrile;
- [3aR-(3 α ,4 β ,5 β ,7 β ,7 α)]-4-[7-[2-(1,2-Benzisoxazol-3-yloxy)ethyl]octahydro-5-hydroxy-4-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-
- 20 naphthalenecarbonitrile;
- (3 α ,4 β ,5 β ,7 β ,7 α)]-4-(Octahydro-5-hydroxy-4,7-dimethyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl)-2-(trifluoromethyl)benzonitrile;
- (3 α ,4 β ,5 β ,7 β ,7 α)]-4-(Octahydro-5-hydroxy-4,7-dimethyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl)-2-(trifluoromethyl)benzonitrile;
- 25 (3 α ,4 β ,7 β ,7 α)-2-(4-Cyano-1-naphthalenyl)octahydro-1,3-dioxo-7-[2-(phenylmethoxy)ethyl]-4,7-epoxy-4H-isoindole-4-propanenitrile;
- (3 α ,4 α ,7 α ,7 α)-2-(4-Cyano-1-naphthalenyl)octahydro-1,3-dioxo-7-[2-(phenylmethoxy)ethyl]-4,7-epoxy-4H-isoindole-4-propanenitrile;
- (3 α ,4 β ,7 β ,7 α)-2-(4-Cyano-1-naphthalenyl)octahydro-7-(2-hydroxyethyl)-
- 30 1,3-dioxo-4,7-epoxy-4H-isoindole-4-propanenitrile;

- (3 α ,4 α ,7 α ,7 α)-2-(4-Cyano-1-naphthalenyl)octahydro-7-(2-hydroxyethyl)-1,3-dioxo-4,7-epoxy-4H-isoindole-4-propanenitrile;
- (3 α ,4 β ,7 β ,7 α)-2-(4-Cyano-1-naphthalenyl)-7-[2-(4-fluorophenoxy)ethyl]octahydro-1,3-dioxo-4,7-epoxy-4H-isoindole-4-propanenitrile;
- 5 (3 α ,4 β ,7 β ,7 α)-2-(7-Chloro-2,1,3-benzoxadiazol-4-yl)hexahydro-4,7-dimethyl-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- (3 α ,4 β ,7 β ,7 α)-2-(7-Chloro-2-methyl-4-benzofuranyl)hexahydro-4,7-dimethyl-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- 10 (3 α ,4 β ,7 β ,7 α)-2-(7-Chloro-2-methylbenzo[b]thiophen-4-yl)hexahydro-4,7-dimethyl-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- [3 α ,4 β (E),7 β ,7 α]-4-[2-(4-Cyano-1-naphthalenyl)octahydro-7-methyl-1,3-dioxo-4,7-epoxy-4H-isoindol-4-yl]-2-butyric acid, phenylmethyl ester;
- (3 α ,4 β ,7 β ,7 α)-2-(4-Cyano-1-naphthalenyl)octahydro-7-methyl-1,3-dioxo-4,7-epoxy-4H-isoindole-4-butyric acid;
- 15 (3 α ,4 β ,7 β ,7 α)-2-(4-Cyano-1-naphthalenyl)-N-(4-fluorophenyl)octahydro-7-methyl-1,3-dioxo-4,7-epoxy-4H-isoindole-4-butanamide;
- [3aS-(3 α ,4 β ,5 β ,7 β ,7 α)]-4-[7-[2-(Acetoxy)ethyl]octahydro-5-hydroxy-4-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
- 20 [3aR-(3 α ,4 β ,5 β ,7 β ,7 α)]-4-[Octahydro-5-hydroxy-7-(2-hydroxyethyl)-4-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
- (3 α ,4 β ,7 β ,7 α (E))-4-[Octahydro-4-methyl-1,3-dioxo-7-(4-oxo-4-phenyl-2-butenyl)-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
- (3 α ,4 β ,7 β ,7 α (E))-4-[Octahydro-4-methyl-1,3-dioxo-7-(4-oxo-4-phenyl-2-butenyl)-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
- 25 (3 α ,4 β ,7 β ,7 α)-(4-[7-[2-(4-Bromophenoxy)ethyl]octahydro-4-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-2-(trifluoromethyl)benzonitrile;
- (3 α ,4 β ,7 β ,7 α)-4-[Octahydro-7-[2-(4-iodophenoxy)ethyl]-4-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-2-(trifluoromethyl)benzonitrile;

- (3 α ,4 β ,7 β ,7 α)-4-[Octahydro-4-methyl-1,3-dioxo-7-[2-[4-(trifluoromethyl)phenoxy]ethyl]-4,7-epoxy-2H-isoindol-2-yl]-2-(trifluoromethyl)benzonitrile;
- (3 α ,4 β ,7 β ,7 α)-4-[Octahydro-7-[2-(4-methoxyphenoxy)ethyl]-4-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-2-(trifluoromethyl)benzonitrile;
- 5 (3 α ,4 β ,7 β ,7 α)-4-[7-[2-(4-Ethoxyphenoxy)ethyl]octahydro-4-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-2-(trifluoromethyl)benzonitrile;
- (3 α ,4 β ,7 β ,7 α)-4-[7-[2-(4-Chlorophenoxy)ethyl]octahydro-4-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-2-(trifluoromethyl)benzonitrile;
- 10 (3 α ,4 β ,7 β ,7 α)-4-[2-[2-[4-Cyano-3-(trifluoromethyl)phenyl]octahydro-7-methyl-1,3-dioxo-4,7-epoxy-4H-isoindol-4-yl]ethoxy]benzoic acid, methyl ester;
- (3 α ,4 β ,7 β ,7 α)-Hexahydro-4-(2-hydroxyethyl)-7-methyl-2-(3-methyl-4-nitrophenyl)-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- 15 (3 α ,4 β ,7 β ,7 α)-4-[Octahydro-4-methyl-1,3-dioxo-7-[2-[4-(trifluoromethoxy)phenoxy]ethyl]-4,7-epoxy-2H-isoindol-2-yl]-2-(trifluoromethyl)benzonitrile;
- (3 α ,4 β ,7 β ,7 α)-2-(3,5-Dichlorophenyl)hexahydro-4,7-dimethyl-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- 20 (3 α ,4 β ,7 β ,7 α)-Hexahydro-4,7-dimethyl-2-(4-nitro-1-naphthalenyl)-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- (3 α ,4 β ,7 β ,7 α)-4-[Octahydro-4-methyl-1,3-dioxo-7-[2-[4-(phenylmethoxy)phenoxy]ethyl]-4,7-epoxy-2H-isoindol-2-yl]-2-(trifluoromethyl)benzonitrile;
- 25 (3 α ,4 β ,7 β ,7 α)-Hexahydro-4-(2-hydroxyethyl)-7-methyl-2-(4-nitro-1-naphthalenyl)-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- (3 α ,4 β ,7 β ,7 α)-4-[2-(4-Fluorophenoxy)ethyl]hexahydro-7-methyl-2-(3-methyl-4-nitrophenyl)-4,7-epoxy-1H-isoindole-1,3(2H)-dione;

- (3 α ,4 β ,7 β ,7 α)-4-[Octahydro-4-methyl-1,3-dioxo-7-[2-[4-
[(trifluoromethyl)thio]phenoxy]ethyl]-4,7-epoxy-2H-isoindol-2-yl]-2-
(trifluoromethyl)benzonitrile;
- (3 α ,4 β ,7 β ,7 α)-4-[Octahydro-4-methyl-7-[2-(4-nitrophenoxy)ethyl]-1,3-dioxo-
5 4,7-epoxy-2H-isoindol-2-yl]-2-(trifluoromethyl)benzonitrile;
- (3 α ,4 β ,7 β ,7 α)-4-[2-(4-Fluorophenoxy)ethyl]hexahydro-7-methyl-2-(4-nitro-
1-naphthalenyl)-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- (3 α ,4 β ,7 β ,7 α)-4-[Octahydro-7-methyl-1,3-dioxo-7-[2-[2-
(trifluoromethyl)phenoxy]ethyl]-4,7-epoxy-2H-isoindol-2-yl]-2-
10 (trifluoromethyl)benzonitrile;
- (3 α ,4 β ,7 β ,7 α)-4-[4-[2-(2-Bromophenoxy)ethyl]octahydro-7-methyl-1,3-
dioxo-4,7-epoxy-2H-isoindol-2-yl]-2-(trifluoromethyl)benzonitrile;
- (3 α ,4 β ,7 β ,7 α)-4-[4-[2-(3-Fluorophenoxy)ethyl]octahydro-7-methyl-1,3-
dioxo-4,7-epoxy-2H-isoindol-2-yl]-2-(trifluoromethyl)benzonitrile;
- 15 (3 α ,4 β ,7 β ,7 α)-Hexahydro-2-[4-(1H-imidazol-1-yl)phenyl]-4-methyl-4,7-
epoxy-1H-isoindole-1,3(2H)-dione;
- (3 α ,4 β ,7 β ,7 α)-2-[3-Chloro-4-(2-thiazolyl)phenyl]hexahydro-4-methyl-4,7-
epoxy-1H-isoindole-1,3(2H)-dione;
- (3 α ,4 β ,7 β ,7 α)-Hexahydro-4,7-dimethyl-2-(3-methyl-4-nitrophenyl)-4,7-
20 epoxy-1H-isoindole-1,3(2H)-dione;
- (3 α ,4 β ,7 β ,7 α)-Hexahydro-4,7-dimethyl-2-(2-methyl-4-nitrophenyl)-4,7-
epoxy-1H-isoindole-1,3(2H)-dione;
- (3 α ,4 β ,7 β ,7 α)-2-(3,5-Dichlorophenyl)hexahydro-4-(2-hydroxyethyl)-7-
methyl-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- 25 (3 α ,4 β ,7 β ,7 α)-2-(3,5-Dichlorophenyl)-4-[2-(4-
fluorophenoxy)ethyl]hexahydro-7-methyl-4,7-epoxy-1H-isoindole-1,3(2H)-
dione;
- (3 α ,4 β ,7 β ,7 α)-4-[Octahydro-4-[2-(4-hydroxyphenoxy)ethyl]-7-methyl-1,3-
dioxo-4,7-epoxy-2H-isoindol-2-yl]-2-(trifluoromethyl)benzonitrile;

- (3 α ,4 β ,7 β ,7 α)-4-[4-[2-(4-Cyanophenoxy)ethyl]octahydro-7-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-2-(trifluoromethyl)benzonitrile;
(3 α ,4 β ,7 β ,7 α)-4-[Octahydro-4-methyl-1,3-dioxo-7-[2-[3-(trifluoromethyl)phenoxy]ethyl]-4,7-epoxy-2H-isoindol-2-yl]-2-(trifluoromethyl)benzonitrile;
5 (trifluoromethyl)benzonitrile;
(3 α ,4 β ,7 β ,7 α)-4-[4-[2-(3-Bromophenoxy)ethyl]octahydro-7-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-2-(trifluoromethyl)benzonitrile;
(3 α ,4 β ,7 β ,7 α)-4-[4-[(4-Fluorophenyl)methyl]octahydro-7-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-2-(trifluoromethyl)benzonitrile;
10 (3 α ,4 β ,7 β ,7 α)-2-(1,6-Dihydro-1-methyl-6-oxo-3-pyridinyl)hexahydro-4,7-dimethyl-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
(3 α ,4 β ,7 β ,7 α)-Hexahydro-4,7-dimethyl-2-(1-methyl-6-oxo-3-piperidinyl)-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
(3 α ,4 β ,7 β ,7 α)-4-[4-[2-(3-Cyanophenoxy)ethyl]octahydro-7-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-2-(trifluoromethyl)benzonitrile;
15 (3 α ,4 β ,7 β ,7 α)-4-[2-[4-Cyano-3-(trifluoromethyl)phenyl]octahydro-7-methyl-1,3-dioxo-4,7-epoxy-4H-isoindol-4-yl]ethoxy]benzoic acid, phenylmethyl ester;
(3 α ,4 β ,7 β ,7 α)-4-[Octahydro-4-methyl-1,3-dioxo-7-(2-phenoxyethyl)-4,7-epoxy-2H-isoindol-2-yl]-2-(trifluoromethyl)benzonitrile;
20 (3 α ,4 β ,7 β ,7 α)-2-(3,5-Dichloro-4-nitrophenyl)hexahydro-4,7-dimethyl-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
(3 α ,4 β ,7 β ,7 α)-2-(3,5-Dichloro-4-hydroxyphenyl)hexahydro-4,7-dimethyl-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
(3 α ,4 β ,7 β ,7 α)-2-(5-Fluoro-1-naphthalenyl)hexahydro-4,7-dimethyl-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
25 (3 α ,4 β ,7 β ,7 α)-Hexahydro-4,7-dimethyl-2-(1-naphthalenyl)-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
(3 α ,4 β ,7 β ,7 α)-Hexahydro-2-[3-methoxy-4-(5-oxazolyl)phenyl]-4,7-dimethyl-4,7-epoxy-1H-isoindole-1,3(2H)-dione;

- (3 α ,4 β ,7 β ,7 α)-Hexahydro-4-[2-(4-methoxyphenoxy)ethyl]-7-methyl-2-(4-nitro-1-naphthalenyl)-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- (3 α ,4 β ,7 β ,7 α)-Hexahydro-4-methyl-2-(4-nitro-1-naphthalenyl)-7-[2-[4-(trifluoromethyl)phenoxy]ethyl]-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- 5 (3 α ,4 β ,7 β ,7 α)-Hexahydro-4-methyl-2-(4-nitro-1-naphthalenyl)-7-[2-(4-nitrophenoxy)ethyl]-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- (3 α ,4 β ,7 β ,7 α)-2-(1,6-Dihydro-1,4-dimethyl-6-oxo-3-pyridinyl)hexahydro-4,7-dimethyl-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- (3 α ,4 β ,7 β ,7 α)-4-[Octahydro-7-methyl-2-(4-nitro-1-naphthalenyl)-1,3-dioxo-
- 10 4,7-epoxy-4H-isoindol-4-yl]ethoxy]benzonitrile;
- (3 α ,4 β ,7 β ,7 α)-4-(Octahydro-4,7-dimethyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl)-1,2-benzenedicarbonitrile;
- (3 α ,4 β ,7 β ,7 α)-4-(2-Bromoethyl)hexahydro-7-methyl-2-(4-nitro-1-naphthalenyl)-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- 15 (3 α ,4 β ,7 β ,7 α)-4-[4-[2-(4-Cyanophenoxy)ethyl]octahydro-7-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
- (3 α ,4 β ,7 β ,7 α)-4-[Octahydro-4-[2-(4-methoxyphenoxy)ethyl]-7-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
- (3 α ,4 β ,7 β ,7 α)-4-[Octahydro-4-[2-(3-methoxyphenoxy)ethyl]-7-methyl-1,3-
- 20 dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
- (3 α ,4 β ,7 β ,7 α)-4-[4-[2-(3-Fluorophenoxy)ethyl]octahydro-7-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
- (3 α ,4 β ,7 β ,7 α)-4-[Octahydro-4-methyl-7-[2-[3-(4-morpholinyl)phenoxy]ethyl]-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
- 25 (3 α ,4 β ,7 β ,7 α)-4-[Octahydro-4-methyl-7-[2-[4-nitro-3-(trifluoromethyl)phenoxy]ethyl]-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
- (3 α ,4 β ,7 β ,7 α)-4-[4-[2-(3-Cyanophenoxy)ethyl]octahydro-7-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;

- (3 α ,4 β ,7 β ,7 α)-2-(2,3-Dihydro-3-methyl-2-oxo-6-benzothiazolyl)hexahydro-4,7-dimethyl-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
(3 α ,4 β ,7 β ,7 α)-2-(2,3-Dihydro-2-oxo-6-benzothiazolyl)hexahydro-4,7-dimethyl-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- 5 (3 α ,4 β ,7 β ,7 α)-4-[4-[2-[3-(Dimethylamino)phenoxy]ethyl]octahydro-7-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
(3 α ,4 β ,7 β ,7 α)-4-[2-[4-Cyano-3-(trifluoromethyl)phenyl]octahydro-7-methyl-1,3-dioxo-4,7-epoxy-4H-isoindol-4-yl]ethoxy]-1,2-benzenedicarbonitrile;
(3 α ,4 β ,7 β ,7 α)-N-[2-Cyano-5-(octahydro-4,7-dimethyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl)phenyl]acetamide;
- 10 (3 α ,4 β ,7 β ,7 α)-4-(Octahydro-4,7-dimethyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl)-2-(trifluoromethoxy)benzonitrile;
(3 α ,4 β ,7 β ,7 α)-2-Methoxy-4-(octahydro-4,7-dimethyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl)benzonitrile;
- 15 (3 α ,4 β ,7 β ,7 α)-2-[4-(4,5-Dichloro-1H-imidazol-1-yl)phenyl]hexahydro-4,7-dimethyl-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
(3 α ,4 β ,7 β ,7 α)-2-[4-(4-Bromo-1-methyl-1H-pyrazol-3-yl)phenyl]hexahydro-4,7-dimethyl-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
(3 α ,4 β ,7 β ,7 α)-4-[Octahydro-4-(2-hydroxyethyl)-7-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
- 20 (3 α ,4 β ,7 β ,7 α)-2-Iodo-4-(Octahydro-4,7-dimethyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl)benzonitrile;
(3 α ,4 β ,7 β ,7 α)-4-[4-[2-(4-Fluorophenoxy)ethyl]octahydro-7-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
- 25 (3 α ,4 β ,7 β ,7 α)-4-[Octahydro-4-methyl-1,3-dioxo-7-[2-[4-(trifluoromethyl)phenoxy]ethyl]-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
(3 α ,4 β ,7 β ,7 α)-4-[4-[2-(4-Cyano-3-fluorophenoxy)ethyl]octahydro-7-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;

- (3 α ,4 β ,7 β ,7 α)-4-[Octahydro-4-methyl-1,3-dioxo-7-[2-[2,3,5,6-tetrafluoro-4-(trifluoromethyl)phenoxy]ethyl]-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
- (3 α ,4 β ,7 β ,7 α)-Hexahydro-4,7-dimethyl-2-[4-(1H-1,2,4-triazol-3-yl)phenyl]-
- 5 4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- (3 α ,4 β ,7 β ,7 α)-2-[4-(4,5-Dihydro-5-oxo-1,2,4-oxadiazol-3-yl)phenyl]hexahydro-4,7-dimethyl-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- (3 α ,4 β ,7 β ,7 α)-Hexahydro-2-[3-methoxy-4-(2-oxazoly)phenyl]-4,7-dimethyl-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- 10 (3 α ,4 β ,7 β ,7 α)-Hexahydro-2-(4-hydroxy-1-naphthalenyl)-4,7-dimethyl-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- (3 α ,4 β ,7 β ,7 α)-Hexahydro-2-(8-hydroxy-5-quinoliny)-4,7-dimethyl-4,7-epoxy-1H-isoindole-1,3(2H)-dione, trifluoroacetate;
- (3 α ,4 β ,7 β ,7 α)-4-[Octahydro-4-methyl-1,3-dioxo-7-[2-
- 15 [methyl(phenylmethyl)amino]ethyl]-4,7-epoxy-2H-isoindol-2-yl]-2-(trifluoromethyl)benzonitrile;
- (3 α ,4 β ,7 β ,7 α)-Hexahydro-4,7-dimethyl-2-(5-quinoliny)-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- (3 α ,4 β ,7 β ,7 α)-5-(Octahydro-4,7-dimethyl-1,3-dioxo-4,7-epoxy-2H-isoindol-
- 20 2-yl)-2-pyridinecarbonitrile;
- (3 α ,4 β ,7 β ,7 α)-5-(Octahydro-4,7-dimethyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl)-8-quinolinecarbonitrile;
- (3 α ,4 β ,7 β ,7 α)-2-(5-Bromo-4-nitro-1-naphthalenyl)hexahydro-4,7-dimethyl-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- 25 (3 α ,4 β ,7 β ,7 α)-2-(5-Bromo-1-naphthalenyl)hexahydro-4,7-dimethyl-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- (3 α ,4 β ,7 β ,7 α)-Hexahydro-4,7-dimethyl-2-[8-(trifluoromethyl)-4-quinoliny]-4,7-epoxy-1H-isoindole-1,3(2H)-dione;

- 4-Fluorobenzoic acid, 2-[(3 α ,4 β ,7 β ,7 α)-2-(4-cyano-1-naphthalenyl)octahydro-7-methyl-1,3-dioxo-4,7-epoxy-4H-isoindol-4-y]ethyl ester;
- Benzeneacetic acid, 2-[(3 α ,4 β ,7 β ,7 α)-2-(4-cyano-1-naphthalenyl)octahydro-7-methyl-1,3-dioxo-4,7-epoxy-4H-isoindol-4-y]ethyl ester;
- 5 4-Fluorobenzeneacetic acid, 2-[(3 α ,4 β ,7 β ,7 α)-2-(4-cyano-1-naphthalenyl)octahydro-7-methyl-1,3-dioxo-4,7-epoxy-4H-isoindol-4-y]ethyl ester;
- 10 (3 α ,4 β ,7 β ,7 α)-Hexahydro-4-methyl-7-[2-[4-(methylsulfonyl)phenoxy]ethyl]-2-(4-nitro-1-naphthalenyl)-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- (3 α ,4 β ,7 β ,7 α)-Hexahydro-2-(2-naphthalenyl)-4,7-dimethyl-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- (3 α ,4 β ,7 β ,7 α)-2-(4-Chloro-1-naphthalenyl)hexahydro-4,7-dimethyl-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- 15 (3 α ,4 β ,7 β ,7 α)-N-[(4-Chlorophenyl)methyl]-2-(4-cyano-1-naphthalenyl)octahydro-7-methyl-1,3-dioxo-4,7-epoxy-4H-isoindole-4-acetamide;
- 4,7,7-Trimethyl-3-oxo-2-oxabicyclo[2.2.1]heptane-1-carboxylic acid, 2-[(3 α ,4 β ,7 β ,7 α)-2-(4-cyano-1-naphthalenyl)octahydro-7-methyl-1,3-dioxo-4,7-epoxy-4H-isoindol-4-y]ethyl ester;
- 20 (α S)- α -Methoxy- α -(trifluoromethyl)benzeneacetic acid, 2-[(3 α ,4 β ,7 β ,7 α)-2-(4-cyano-1-naphthalenyl)octahydro-7-methyl-1,3-dioxo-4,7-epoxy-4H-isoindol-4-y]ethyl ester;
- 25 (α R)- α -Methoxy- α -(trifluoromethyl)benzeneacetic acid, 2-[(3 α ,4 β ,7 β ,7 α)-2-(4-cyano-1-naphthalenyl)octahydro-7-methyl-1,3-dioxo-4,7-epoxy-4H-isoindol-4-y]ethyl ester;
- (3 α ,4 β ,7 β ,7 α)-4-[Octahydro-4-methyl-7-[2-[(7-methyl-1,2-benzisoxazol-3-yl)oxy]ethyl]-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
- 30 (3 α ,4 β ,7 β ,7 α)-4-[4-[2-(1,2-Benzisoxazol-3-yl)oxy]ethyl]octahydro-7-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;

- (3a α ,4 β ,7 β ,7a α)-4-[2-(Benzoyloxy)ethyl]-2-(4-cyano-1-naphthalenyl)hexahydro-7-methyl-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
 (3a α ,4 β ,7 β ,7a α)-2-(4-Cyano-1-naphthalenyl)-4-[2-[(4-nitrobenzoyl)oxy]ethyl]hexahydro-7-methyl-4,7-epoxy-1H-isoindole-1,3(2H)-
 5 dione;
 4-Chlorobenzoic acid, 2-[(3a α ,4 β ,7 β ,7a α)-2-(4-cyano-1-naphthalenyl)octahydro-7-methyl-1,3-dioxo-4,7-epoxy-4H-isoindol-4-yl]ethyl ester;
 [3a α ,4 β ,7 β ,7a α (E)]-4-[Octahydro-4-methyl-7-[3-(1-naphthalenyl)-2-propenyl]-
 10 1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
 (3a α ,4 β ,7 β ,7a α)-4-[Octahydro-4-methyl-7-[3-(1-naphthalenyl)propyl]-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
 (3a α ,4 β ,7 β ,7a α)-Hexahydro-4,7-dimethyl-2-(2-methyl-6-quinolinyl)-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
 15 (3a α ,4 β ,7 β ,7a α)-Hexahydro-2-(5-isoquinolinyl)-4,7-dimethyl-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
 (3a α ,4 β ,7 β ,7a α)-2-(6-Benzothiazolyl)hexahydro-4,7-dimethyl-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
 [3a α ,4 β ,7 β ,7a α (E)]-4-[Octahydro-4-methyl-1,3-dioxo-7-(4-oxo-4-phenyl-2-
 20 butenyl)-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
 (3a α ,4 β ,7 β ,7a α)-2-(4-Cyano-1-naphthalenyl)octahydro-N-(2-hydroxyphenyl)-7-methyl-1,3-dioxo-4,7-epoxy-4H-isoindole-4-acetamide;
 [3a α ,4 β (E),7 β ,7a α]-4-[Octahydro-4-methyl-7-[3-(6-methyl-2-pyridinyl)-2-propenyl]-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
 25 (3a α ,4 β ,7 β ,7a α)-4-[Octahydro-4-methyl-7-[3-(6-methyl-2-pyridinyl)propyl]-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
 [3aR-(3a α ,4 β ,7 β ,7a α)]-4-[Octahydro-4-[2-(3-methoxyphenoxy)ethyl]-7-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
 [3aS-(3a α ,4 β ,7 β ,7a α)]-4-[Octahydro-4-[2-(3-methoxyphenoxy)ethyl]-7-methyl-
 30 1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;

- [3aR-(3a α ,4 β ,7 β ,7a α)]-4-[4-[2-(4-Cyanophenoxy)ethyl]octahydro-7-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
- [3aS-(3a α ,4 β ,7 β ,7a α)]-4-[4-[2-(4-Cyanophenoxy)ethyl]octahydro-7-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
- 5 (3a α ,4 α ,7 α ,7a α)-4-[4-[(4-Fluorophenyl)methyl]octahydro-7-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-2-(trifluoromethyl)benzonitrile;
- (3a α ,4 α ,7 α ,7a α)-Hexahydro-4,7-dimethyl-2-(1-methyl-6-oxo-3-piperidinyl)-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- (3a α ,4 α ,7 α ,7a α)-2-(1,6-Dihydro-1,4-dimethyl-6-oxo-3-pyridinyl)hexahydro-
- 10 4,7-dimethyl-4,7-epoxy-1H-isoindole-1,3(2H)-dione;
- (3a α ,4 β ,7 β ,7a α)-2-[4-Cyano-3-(trifluoromethyl)phenyl]octahydro-1,3-dioxo-7-[2-(phenylmethoxy)ethyl]-4,7-epoxy-4H-isoindole-4-propanenitrile;
- (3a α ,4 β ,7 β ,7a α)-2-[4-Cyano-3-(trifluoromethyl)phenyl]octahydro-1,3-dioxo-7-[2-(phenylmethoxy)ethyl]-4,7-epoxy-4H-isoindole-4-propanenitrile;
- 15 (3a α ,4 β ,7 β ,7a α)-4-[7-[2-(4-Cyanophenoxy)ethyl]octahydro-5-hydroxy-4-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
- [3aS-(3a α ,4 β ,7 β ,7a α)]-4-[7-[2-(1,3-Benzodioxol-5-yloxy)ethyl]octahydro-5-hydroxy-4-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
- 20 [3aR-(3a α ,4 β ,7 β ,7a α)]-4-[7-[2-(1,3-Benzodioxol-5-yloxy)ethyl]octahydro-5-hydroxy-4-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
- [3aS-(3a α ,4 β ,7 β ,7a α)]-4-[7-[2-[(5-Chloro-2-pyridinyl)oxy]ethyl]octahydro-5-hydroxy-4-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
- 25 naphthalenecarbonitrile;
- [3aR-(3a α ,4 β ,7 β ,7a α)]-4-[7-[2-[(5-Chloro-2-pyridinyl)oxy]ethyl]octahydro-5-hydroxy-4-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
- [3aS-(3a α ,4 β ,7 β ,7a α)]-4-[7-[2-(4-Chlorophenoxy)ethyl]octahydro-5-hydroxy-4-
- 30 methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;

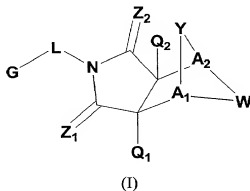
- [3aR-(3a α ,4 β ,7 β ,7a α)]-4-[7-[2-(4-Chlorophenoxy)ethyl]octahydro-5-hydroxy-4-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
- [3aS-(3a α ,4 β ,7 β ,7a α)]-4-[7-[2-(4-Acetylphenoxy)ethyl]octahydro-5-hydroxy-4-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
- 5 [3aR-(3a α ,4 β ,7 β ,7a α)]-4-[7-[2-(4-Acetylphenoxy)ethyl]octahydro-5-hydroxy-4-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
- [3aS-(3a α ,4 β ,7 β ,7a α)]-4-[7-[2-(3-Cyanophenoxy)ethyl]octahydro-5-hydroxy-4-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
- [3aR-(3a α ,4 β ,7 β ,7a α)]-4-[7-[2-(3-Cyanophenoxy)ethyl]octahydro-5-hydroxy-4-
- 10 methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
- [3aS-(3a α ,4 β ,7 β ,7a α)]-4-[Octahydro-5-hydroxy-4-methyl-1,3-dioxo-7-[2-[(5,6,7,8-tetrahydro-1-naphthalenyl)oxy]ethyl]-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
- [3aR-(3a α ,4 β ,7 β ,7a α)]-4-[Octahydro-5-hydroxy-4-methyl-1,3-dioxo-7-[2-
- 15 [(5,6,7,8-tetrahydro-1-naphthalenyl)oxy]ethyl]-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
- [3aS-(3a α ,4 β ,7 β ,7a α)]-4-[Octahydro-5-hydroxy-4-methyl-1,3-dioxo-7-[2-[(5,6,7,8-tetrahydro-5-oxo-1-naphthalenyl)oxy]ethyl]-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
- [3aR-(3a α ,4 β ,7 β ,7a α)]-4-[Octahydro-5-hydroxy-4-methyl-1,3-dioxo-7-[2-
- 20 [(5,6,7,8-tetrahydro-5-oxo-1-naphthalenyl)oxy]ethyl]-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
- [3aS-(3a α ,4 β ,7 β ,7a α)]-4-[7-[2-(4-Fluorophenoxy)ethyl]octahydro-5-hydroxy-4-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
- 25 [3aR-(3a α ,4 β ,7 β ,7a α)]-4-[7-[2-(4-Fluorophenoxy)ethyl]octahydro-5-hydroxy-4-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
- [3aS-(3a α ,4 β ,7 β ,7a α)]-4-[Octahydro-5-hydroxy-4-methyl-7-[2-[(4-methyl-2-oxo-2H-1-benzopyran-7-yl)oxy]ethyl]-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;

- [3aR-(3 α ,4 β ,7 β ,7 α)]-4-[Octahydro-5-hydroxy-4-methyl-7-[2-[(4-methyl-2-oxo-2H-1-benzopyran-7-yl)oxy]ethyl]-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
- 5 [3aS-(3 α ,4 β ,7 β ,7 α)]-4-[7-[2-(3,5-Dimethoxyphenoxy)ethyl]octahydro-5-hydroxy-4-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
- [3aR-(3 α ,4 β ,7 β ,7 α)]-4-[7-[2-(3,5-Dimethoxyphenoxy)ethyl]octahydro-5-hydroxy-4-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
- 10 [3aR-(3 α ,4 β ,7 β ,7 α)]-4-[7-[2-(4-Chloro-3-methylphenoxy)ethyl]octahydro-5-hydroxy-4-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
- [3aR-(3 α ,4 β ,7 β ,7 α)]-4-[7-[2-(4-Cyano-2,3-difluorophenoxy)ethyl]octahydro-5-hydroxy-4-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
- 15 [3aS-(3 α ,4 β ,7 β ,7 α)]-4-[7-[2-[(5-Chloro-1,2-benzisoxazol-3-yl)oxy]ethyl]octahydro-5-hydroxy-4-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
- [3aR-(3 α ,4 β ,7 β ,7 α)]-4-[7-[2-[(5-Chloro-1,2-benzisoxazol-3-yl)oxy]ethyl]octahydro-5-hydroxy-4-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
- 20 [3aR-(3 α ,4 β ,7 β ,7 α)]-3-[2-[2-(4-Cyano-1-naphthalenyl)octahydro-6-hydroxy-7-methyl-1,3-dioxo-4,7-epoxy-4H-isoindol-4-yl]ethoxy]-5-isoxazolecarboxylic acid, methyl ester;
- 25 [3aR-(3 α ,4 β ,7 β ,7 α)]-4-[Octahydro-5-hydroxy-4-methyl-1,3-dioxo-7-[2-[4-(1H-1,2,4-triazol-1-yl)phenoxy]ethyl]-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
- [3aS-(3 α ,4 β ,7 β ,7 α)]-4-[7-[2-[(7-Chloro-4-quinolinyl)oxy]ethyl]octahydro-5-hydroxy-4-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile, trifluoroacetate;
- 30

[3aR-(3 α ,4 β ,7 β ,7 α)]-4-[7-[2-[(7-Chloro-4-quinolinyl)oxy]ethyl]octahydro-5-hydroxy-4-methyl-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile, trifluoroacetate;

- (1 α ,2 β ,2 α ,5 α ,6 β ,6 α)-4-[2-[2-[[[(1,1-dimethylethyl)-dimethylsilyl]oxy]ethyl]octahydro- 6-methyl-3,5-dioxo-2,6-epoxy-4H-oxireno[f]isoindol-4-yl]-1-naphthalenecarbonitrile;
- [3aR-(3 α ,4 β ,7 β ,7 α)]-4-[4-Ethyl octahydro-7-(2-hydroxyethyl)-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile;
- [3aS-(3 α ,4 β ,7 β ,7 α)]-4-[4-Ethyl octahydro-7-(2-hydroxyethyl)-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitril;
- [3aR-(3 α ,4 β ,7 β ,7 α)]-4-[4-[2-(4-Cyanophenoxy)ethyl]-7-ethyl octahydro-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile; and
- [3aS-(3 α ,4 β ,7 β ,7 α)]-4-[4-[2-(4-Cyanophenoxy)ethyl]-7-ethyl octahydro-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl]-1-naphthalenecarbonitrile.

5. A pharmaceutical composition capable of treating a NHR - associated condition, comprising a compound of the following formula I or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable carrier:



wherein the symbols have the following meanings and are, for each occurrence, independently selected:

- G is an aryl or heterocyclo group, where said group is mono- or polycyclic, and which is optionally substituted at one or more positions;

Z_1 is O, S, NH, or NR^6 ;

Z_2 is O, S, NH, or NR^6 ;

A_1 is CR^7 or N;

A_2 is CR^7 or N;

- 5 Y is $J-J''$ where J is $(CR^7R^7')^n$ and $n = 0-3$, J' is a bond or O, S, $S=O$, SO_2 , NH, NR^7 , $C=O$, $OC=O$, $NR^1C=O$, CR^7R^7' , $C=CR^6R^8$, $R^2P=O$, $R^2P=S$, $R^2OP=O$, $R^2NHP=O$, $OP=OOR^2$, $OP=ONHR^2$, $OP=OR^2$, OSO_2 , $C=NR^7$, $NHNH$, $NHNR^6$, NR^6NH , $N=N$, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo or aryl or substituted aryl, and J'' is $(CR^7R^7')^n$ and $n = 0-3$, where Y is not a bond;
- 10 W is $CR^7R^7'—CR^7R^7'$, $CR^8=CR^8$, $CR^7R^7'—C=O$, $NR^9—CR^7R^7'$, $N=CR^8$, $N=N$, $NR^9—NR^9$, $S—CR^7R^7'$, $SO—CR^7R^7'$, $SO_2—CR^7R^7'$, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo, or aryl or substituted aryl, wherein when W is not $NR^9—CR^7R^7'$, $N=CR^8$, $N=N$, $NR^9—NR^9$, $S—CR^7R^7'$, $SO—CR^7R^7'$, $SO_2—CR^7R^7'$, or heterocyclo or substituted heterocyclo, then J' must be O, S, $S=O$, SO_2 , NH, NR^7 , $OC=O$, $NR^1C=O$, $OP=OOR^2$, $OP=ONHR^2$, OSO_2 , $NHNH$, $NHNR^6$, NR^6NH , or $N=N$;
- 15 Q_1 is H, alkyl or substituted alkyl, alkenyl or substituted alkenyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocycloalkyl or substituted heterocycloalkyl, arylalkyl or substituted arylalkyl, alkynyl or substituted alkynyl, aryl or substituted aryl, heterocyclo or substituted heterocyclo, halo, CN, $R^1OC=O$, $R^4C=O$, $R^2R^6NC=O$, $HO CR^7R^7'$, nitro, R^1OCH_2 , R^1O , NH_2 , $C=OSR^1$, SO_2R^1 or NR^4R^5 ;
- 20 Q_2 is H, alkyl or substituted alkyl, alkenyl or substituted alkenyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocycloalkyl or substituted heterocycloalkyl, arylalkyl or substituted arylalkyl, alkynyl or substituted alkynyl, aryl or substituted aryl, heterocyclo or substituted heterocyclo, halo, CN, $R^1OC=O$, $R^4C=O$, $R^2R^6NC=O$, $HO CR^7R^7'$, nitro, R^1OCH_2 , R^1O , NH_2 , $C=OSR^1$, SO_2R^1 or NR^4R^5 ;
- 25 Q_3 is H, alkyl or substituted alkyl, alkenyl or substituted alkenyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocycloalkyl or substituted heterocycloalkyl, arylalkyl or substituted arylalkyl, alkynyl or substituted alkynyl, aryl or substituted aryl, heterocyclo or substituted heterocyclo, halo, CN, $R^1OC=O$, $R^4C=O$, $R^2R^6NC=O$, $HO CR^7R^7'$, nitro, R^1OCH_2 , R^1O , NH_2 , $C=OSR^1$, SO_2R^1 or NR^4R^5 ;
- 30

L is a bond, $(CR^7R^7)n$, NH, NR^5 , $NH(CR^7R^7)n$ or $NR^5(CR^7R^7)n$, where $n = 0-3$;

R¹ and R^{1'} are each independently H, alkyl or substituted alkyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo, cycloalkylalkyl or substituted cycloalkylalkyl, cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or substituted heterocycloalkyl, aryl or substituted aryl, arylalkyl or substituted arylalkyl;

R² is alkyl or substituted alkyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo, cycloalkylalkyl or substituted cycloalkylalkyl, cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or substituted heterocycloalkyl, aryl or substituted aryl, arylalkyl or substituted arylalkyl;

R³ and R^{3'} are each independently H, alkyl or substituted alkyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo, cycloalkylalkyl or substituted cycloalkylalkyl, cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or substituted heterocycloalkyl, aryl or substituted aryl, arylalkyl or substituted arylalkyl, halo, CN, hydroxylamine, hydroxamide, alkoxy or substituted alkoxy, amino, NR^1R^2 , thiol, alkylthio or substituted alkylthio;

R⁴ is H, alkyl or substituted alkyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo, cycloalkylalkyl or substituted cycloalkylalkyl, cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or substituted heterocycloalkyl, aryl or substituted aryl, arylalkyl or substituted arylalkyl, $R^1C=O$, $R^1NHC=O$, SO_2OR^1 , or $SO_2NR^1R^1$;

R⁵ is alkyl or substituted alkyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo, cycloalkylalkyl or substituted cycloalkylalkyl, cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or substituted heterocycloalkyl, aryl or substituted aryl, arylalkyl or substituted arylalkyl, $R^1C=O$, $R^1NHC=O$, SO_2R^1 , SO_2OR^1 , or $SO_2NR^1R^1$;

5 R^6 is alkyl or substituted alkyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo, cycloalkylalkyl or substituted cycloalkylalkyl, cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or substituted heterocycloalkyl, aryl or substituted aryl, arylalkyl or substituted arylalkyl, CN, OH, OR¹, R¹C=O, R¹NHC=O, SO₂R¹, SO₂OR¹, or SO₂NR¹R^{1'};

10 R^7 and $R^{7'}$ are each independently H, alkyl or substituted alkyl, alkenyl or substituted alkenyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo, cycloalkylalkyl or substituted cycloalkylalkyl, cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or substituted heterocycloalkyl, aryl or substituted aryl, arylalkyl or substituted arylalkyl, halo, CN, OR¹, nitro, hydroxylamine, hydroxylamide, amino, NHR⁴, NR²R⁵, NOR¹, thiol, alkylthio or substituted alkylthio, R¹C=O, R¹OC=O, R¹NHC=O, SO₂R¹, SOR¹,
15 PO₃R¹R^{1'}, R¹R^{1'}NC=O, C=OSR¹, SO₂R¹, SO₂OR¹, or SO₂NR¹R^{1'}, or, wherein A₁, or A₂ contains a group R⁷ and W contains a group R⁷, said R⁷ groups of A₁ or A₂ and W together form a heterocyclic ring;

20 R^8 and $R^{8'}$ are each independently H, alkyl or substituted alkyl, alkenyl or substituted alkenyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo, cycloalkylalkyl or substituted cycloalkylalkyl, cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or substituted heterocycloalkyl, aryl or substituted aryl, arylalkyl or substituted arylalkyl, nitro, halo, CN, OR¹, amino, NHR⁴, NR²R⁵, NOR¹, alkylthio or substituted alkylthio, C=OSR¹, R¹OC=O, R¹C=O,
25 R¹NHC=O, R¹R^{1'}NC=O, SO₂OR¹, S=OR¹, SO₂R¹, PO₃R¹R^{1'}, or SO₂NR¹R^{1'}; and

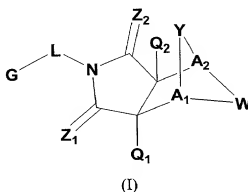
30 R^9 and $R^{9'}$ are each independently H, alkyl or substituted alkyl, alkenyl or substituted alkenyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo, cycloalkylalkyl or substituted cycloalkylalkyl, cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or substituted heterocycloalkyl, aryl or

substituted aryl, arylalkyl or substituted arylalkyl, CN, OH, OR¹, R¹C=O, R¹OC=O, R¹NHC=O, SO₂R¹, SO₂OR¹, or SO₂NR¹R^{1'}.

6. A pharmaceutical composition of Claim 5 further comprising another
5 anti-cancer agent.

7. A method of modulating the function of a nuclear hormone receptor which comprises administering to a mammalian species in need thereof an effective nuclear hormone receptor modulating amount of a compound of the following

- 10 formula I:



- 15 wherein the symbols have the following meanings and are, for each occurrence, independently selected:

G is an aryl or heterocyclo group, where said group is mono- or polycyclic, and which is optionally substituted at one or more positions;

Z₁ is O, S, NH, or NR⁶;

- 20 Z₂ is O, S, NH, or NR⁶;

A₁ is CR⁷ or N;

A₂ is CR⁷ or N;

Y is J-J'-J'' where J is (CR⁷R^{7'})_n and n = 0-3, J' is a bond or O, S, S=O, SO₂, NH,

NR⁷, C=O, OC=O, NR¹C=O, CR⁷R^{7'}, C=CR⁸R^{8'}, R²P=O, R²P=S, R²OP=O,

- 25 R²NHP=O, OP=OOR², OP=ONHR², OP=OR², OSO₂, C=NR⁷, NNNH, NNNR⁶, NR⁶NH, N=N, cycloalkyl or substituted cycloalkyl, cycloalkenyl or

- substituted cycloalkenyl, heterocyclo or substituted heterocyclo or aryl or substituted aryl, and J'' is $(CR^7R^7)'_n$ and $n = 0-3$, where Y is not a bond;
- W is $CR^7R^7-CR^7R^7$, $CR^8=CR^8$, $CR^7R^7-C=O$, $NR^9-CR^7R^7$, $N=CR^8$, $N=N$, NR^9-NR^9 , $S-CR^7R^7$, $SO-CR^7R^7$, $SO_2-CR^7R^7$, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo, or aryl or substituted aryl, wherein when W is not $NR^9-CR^7R^7$, $N=CR^8$, $N=N$, NR^9-NR^9 , $S-CR^7R^7$, $SO-CR^7R^7$, $SO_2-CR^7R^7$, or heterocyclo or substituted heterocyclo, then J' must be O, S, $S=O$, SO_2 , NH, NR^7 , $OC=O$, $NR^1C=O$, $OP=OOR^2$, $OP=ONHR^2$, OSO_2 , $NHNH$, $NHNR^6$, NR^6NH , or $N=N$;
- Q_1 is H, alkyl or substituted alkyl, alkenyl or substituted alkenyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocycloalkyl or substituted heterocycloalkyl, arylalkyl or substituted arylalkyl, alkynyl or substituted alkynyl, aryl or substituted aryl, heterocyclo or substituted heterocyclo, halo, CN, $R^1OC=O$, $R^4C=O$, $R^5R^6NC=O$, $HO-CR^7R^7$, nitro, R^1OCH_2 , R^1O , NH_2 , $C=OSR^1$, SO_2R^1 or NR^4R^5 ;
- Q_2 is H, alkyl or substituted alkyl, alkenyl or substituted alkenyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocycloalkyl or substituted heterocycloalkyl, arylalkyl or substituted arylalkyl, alkynyl or substituted alkynyl, aryl or substituted aryl, heterocyclo or substituted heterocyclo, halo, CN, $R^1OC=O$, $R^4C=O$, $R^5R^6NC=O$, $HO-CR^7R^7$, nitro, R^1OCH_2 , R^1O , NH_2 , $C=OSR^1$, SO_2R^1 or NR^4R^5 ;
- L is a bond, $(CR^7R^7)'_n$, NH, NR^5 , $NH(CR^7R^7)'_n$ or $NR^5(CR^7R^7)'_n$, where $n = 0-3$;
- R^1 and R^7 are each independently H, alkyl or substituted alkyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo, cycloalkylalkyl or substituted cycloalkylalkyl, cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or substituted heterocycloalkyl, aryl or substituted aryl, arylalkyl or substituted arylalkyl;

- 5 R^2 is alkyl or substituted alkyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo, cycloalkylalkyl or substituted cycloalkylalkyl, cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or substituted heterocycloalkyl, aryl or substituted aryl, arylalkyl or substituted arylalkyl;
- 10 R^3 and $R^{3'}$ are each independently H, alkyl or substituted alkyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo, cycloalkylalkyl or substituted cycloalkylalkyl, cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or substituted heterocycloalkyl, aryl or substituted aryl, arylalkyl or substituted arylalkyl, halo, CN, hydroxylamine, hydroxamide, alkoxy or substituted alkoxy, amino, NR^1R^2 , thiol, alkylthio or substituted alkylthio;
- 15 R^4 is H, alkyl or substituted alkyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo, cycloalkylalkyl or substituted cycloalkylalkyl, cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or substituted heterocycloalkyl, aryl or substituted aryl, arylalkyl or substituted arylalkyl, $R^1C=O$, $R^1NHC=O$, SO_2OR^1 , or $SO_2NR^1R^{1'}$;
- 20 R^5 is alkyl or substituted alkyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo, cycloalkylalkyl or substituted cycloalkylalkyl, cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or substituted heterocycloalkyl, aryl or substituted aryl, arylalkyl or substituted arylalkyl, $R^1C=O$, $R^1NHC=O$, SO_2R^1 , SO_2OR^1 , or $SO_2NR^1R^{1'}$;
- 25 R^6 is alkyl or substituted alkyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo, cycloalkylalkyl or substituted cycloalkylalkyl, cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or substituted heterocycloalkyl, aryl or substituted aryl, arylalkyl or substituted arylalkyl, CN, OH, OR^1 , $R^1C=O$, $R^1NHC=O$, SO_2R^1 , SO_2OR^1 , or $SO_2NR^1R^{1'}$;
- 30

R⁷ and R^{7'} are each independently H, alkyl or substituted alkyl, alkenyl or substituted alkenyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo, cycloalkylalkyl or substituted cycloalkylalkyl, cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or substituted heterocycloalkyl, aryl or substituted aryl, arylalkyl or substituted arylalkyl, halo, CN, OR¹, nitro, hydroxylamine, hydroxylamide, amino, NHR⁴, NR²R⁵, NOR¹, thiol, alkylthio or substituted alkylthio, R¹C=O, R¹OC=O, R¹NHC=O, SO₂R¹, SOR¹, PO₃R¹R^{1'}, R¹R^{1'}NC=O, C=OSR¹, SO₂R¹, SO₂OR¹, or SO₂NR¹R^{1'}, or, wherein
10 A₁ or A₂ contains a group R⁷ and W contains a group R⁷, said R⁷ groups of A₁ or A₂ and W together form a heterocyclic ring;

R⁸ and R^{8'} are each independently H, alkyl or substituted alkyl, alkenyl or substituted alkenyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo, cycloalkylalkyl or substituted cycloalkylalkyl, cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or substituted heterocycloalkyl, aryl or substituted aryl, arylalkyl or substituted arylalkyl, nitro, halo, CN, OR¹, amino, NHR⁴, NR²R⁵, NOR¹, alkylthio or substituted alkylthio, C=OSR¹, R¹OC=O, R¹C=O, R¹NHC=O, R¹R^{1'}NC=O, SO₂OR¹, S=OR¹, SO₂R¹, PO₃R¹R^{1'}, or SO₂NR¹R^{1'};
15 and
20

R⁹ and R^{9'} are each independently H, alkyl or substituted alkyl, alkenyl or substituted alkenyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo, cycloalkylalkyl or substituted cycloalkylalkyl, cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or substituted heterocycloalkyl, aryl or substituted aryl, arylalkyl or substituted arylalkyl, CN, OH, OR¹, R¹C=O, R¹OC=O, R¹NHC=O, SO₂R¹, SO₂OR¹, or SO₂NR¹R^{1'}.
25

8. The method of Claim 7 wherein said nuclear hormone receptor is a
30 steroid binding nuclear hormone receptor.

9. The method of Claim 7 wherein said nuclear hormone receptor is the androgen receptor.

5 10. The method of Claim 7 wherein said nuclear hormone receptor is the estrogen receptor.

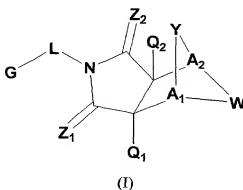
11. The method of Claim 7 wherein said nuclear hormone receptor is the progesterone receptor.

12. The method of Claim 7 wherein said nuclear hormone receptor is the glucocorticoid receptor.

13. The method of Claim 7 wherein said nuclear hormone receptor is the mineralocorticoid receptor.

15 14. The method of Claim 7 wherein said nuclear hormone receptor is the aldosterone receptor.

20 15. A method for treating a condition or disorder comprising administering to a mammalian species in need thereof a therapeutically effective amount of a compound of the following formula:



wherein the symbols have the following meanings and are, for each occurrence, independently selected:

G is an aryl or heterocyclo group, where said group is mono- or polycyclic, and which is optionally substituted at one or more positions;

5 Z_1 is O, S, NH, or NR^6 ;

Z_2 is O, S, NH, or NR^6 ;

A_1 is CR^7 or N;

A_2 is CR^7 or N;

Y is $J-J'-J''$ where J is $(CR^7R^7)_n$ and $n = 0-3$, J' is a bond or O, S, S=O, SO_2 , NH,

10 NR^7 , C=O, OC=O, $NR^1C=O$, CR^7R^7 , $C=CR^8R^8$, $R^2P=O$, $R^2P=S$, $R^2OP=O$, $R^2NHP=O$, $OP=OOR^2$, $OP=ONHR^2$, $OP=OR^2$, OSO_2 , $C=NR^7$, $NHNH$, $NHNH^6$, NR^6NH , $N=N$, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo or aryl or substituted aryl, and J'' is $(CR^7R^7)_n$ and $n = 0-3$, where Y is not a bond;

15 W is $CR^7R^7-CR^7R^7$, $CR^8=CR^8$, $CR^7R^7-C=O$, $NR^9-CR^7R^7$, $N=CR^8$, $N=N$, NR^9-NR^9 , $S-CR^7R^7$, $SO-CR^7R^7$, $SO_2-CR^7R^7$, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo, or aryl or substituted aryl, wherein when W is not $NR^9-CR^7R^7$, $N=CR^8$, $N=N$, NR^9-NR^9 , $S-CR^7R^7$, $SO-CR^7R^7$, SO_2-
20 CR^7R^7 , or heterocyclo or substituted heterocyclo, then J' must be O, S, S=O, SO_2 , NH, NR^7 , OC=O, $NR^1C=O$, $OP=OOR^2$, $OP=ONHR^2$, OSO_2 , $NHNH$, $NHNH^6$, NR^6NH , or $N=N$;

Q_1 is H, alkyl or substituted alkyl, alkenyl or substituted alkenyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl,

25 heterocycloalkyl or substituted heterocycloalkyl, arylalkyl or substituted arylalkyl, alkynyl or substituted alkynyl, aryl or substituted aryl, heterocyclo or substituted heterocyclo, halo, CN, $R^1OC=O$, $R^1C=O$, $R^5R^6NC=O$, $HO-CR^7R^7$, nitro, R^1OCH_2 , R^1O , NH_2 , $C=OSR^1$, SO_2R^1 or NR^4R^5 ;

Q_2 is H, alkyl or substituted alkyl, alkenyl or substituted alkenyl, cycloalkyl or

30 substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl,

- heterocycloalkyl or substituted heterocycloalkyl, arylalkyl or substituted arylalkyl, alkynyl or substituted alkynyl, aryl or substituted aryl, heterocyclo or substituted heterocyclo, halo, CN, $R^1OC=O$, $R^4C=O$, $R^5R^6NC=O$, $HO-CR^7R^{7'}$, nitro, R^1OCH_2 , R^1O , NH_2 , $C=OSR^1$, SO_2R^1 or NR^4R^5 ;
- 5 L is a bond, $(CR^7R^{7'})_n$, NH, NR^5 , $NH(CR^7R^{7'})_n$ or $NR^5(CR^7R^{7'})_n$, where $n = 0-3$;
 R^1 and $R^{1'}$ are each independently H, alkyl or substituted alkyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo, cycloalkylalkyl or substituted cycloalkylalkyl, cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or substituted heterocycloalkyl, aryl or substituted aryl, arylalkyl or substituted arylalkyl;
- 10 R^2 is alkyl or substituted alkyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo, cycloalkylalkyl or substituted cycloalkylalkyl, cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or substituted heterocycloalkyl, aryl or substituted aryl, arylalkyl or substituted arylalkyl;
- 15 R^3 and $R^{3'}$ are each independently H, alkyl or substituted alkyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo, cycloalkylalkyl or substituted cycloalkylalkyl, cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or substituted heterocycloalkyl, aryl or substituted aryl, arylalkyl or substituted arylalkyl, halo, CN, hydroxylamine, hydroxamide, alkoxy or substituted alkoxy, amino, NR^1R^2 , thiol, alkylthio or substituted alkylthio;
- 20 R^4 is H, alkyl or substituted alkyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo, cycloalkylalkyl or substituted cycloalkylalkyl, cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or substituted heterocycloalkyl, aryl or substituted aryl, arylalkyl or substituted arylalkyl, $R^1C=O$, $R^1NHC=O$, SO_2OR^1 , or $SO_2NR^1R^{1'}$;
- 25 R^5 is alkyl or substituted alkyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo,
- 30

cycloalkylalkyl or substituted cycloalkylalkyl, cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or substituted heterocycloalkyl, aryl or substituted aryl, arylalkyl or substituted arylalkyl, $R^1C=O$, $R^1NHC=O$, SO_2R^1 , SO_2OR^1 , or $SO_2NR^1R^1$;

- 5 R^6 is alkyl or substituted alkyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo, cycloalkylalkyl or substituted cycloalkylalkyl, cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or substituted heterocycloalkyl, aryl or substituted aryl, arylalkyl or substituted arylalkyl, CN, OH, OR^1 , $R^1C=O$, $R^1NHC=O$, SO_2R^1 , SO_2OR^1 , or $SO_2NR^1R^1$;

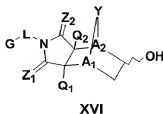
- 10 R^7 and R^7 are each independently H, alkyl or substituted alkyl, alkenyl or substituted alkenyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo, cycloalkylalkyl or substituted cycloalkylalkyl, cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or substituted heterocycloalkyl, aryl or substituted aryl, arylalkyl or substituted arylalkyl, halo, CN, OR^1 , nitro, hydroxylamine, hydroxylamide, amino, NHR^4 , NR^2R^5 , NOR^1 , thiol, alkylthio or substituted alkylthio, $R^1C=O$, $R^1OC=O$, $R^1NHC=O$, SO_2R^1 , SOR^1 , $PO_3R^1R^1$, $R^1R^1NC=O$, $C=OSR^1$, SO_2R^1 , SO_2OR^1 , or $SO_2NR^1R^1$, or, wherein
- 15 A_1 or A_2 contains a group R^7 and W contains a group R^7 , said R^7 groups of A_1 or A_2 and W together form a heterocyclic ring;
- 20

- R^8 and R^8 are each independently H, alkyl or substituted alkyl, alkenyl or substituted alkenyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo, cycloalkylalkyl or substituted cycloalkylalkyl, cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or substituted heterocycloalkyl, aryl or substituted aryl, arylalkyl or substituted arylalkyl, nitro, halo, CN, OR^1 , amino, NHR^4 , NR^2R^5 , NOR^1 , alkylthio or substituted alkylthio, $C=OSR^1$, $R^1OC=O$, $R^1C=O$, $R^1NHC=O$, $R^1R^1NC=O$, SO_2OR^1 , $S=OR^1$, SO_2R^1 , $PO_3R^1R^1$, or $SO_2NR^1R^1$;
- 25
- 30 and

R^9 and $R^{9'}$ are each independently H, alkyl or substituted alkyl, alkenyl or substituted alkenyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo, cycloalkylalkyl or substituted cycloalkylalkyl, cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or substituted heterocycloalkyl, aryl or substituted aryl, arylalkyl or substituted arylalkyl, CN, OH, OR¹, R¹C=O, R¹OC=O, R¹NHC=O, SO₂R¹, SO₂OR¹, or SO₂NR¹R^{1'};

wherein said condition or disorder is selected from the group consisting of proliferate diseases, cancers, benign prostate hypertrophy, adenomas and neoplasias of the prostate, benign or malignant tumor cells containing the androgen receptor, heart disease, angiogenic conditions or disorders, hirsutism, acne, hyperpilosity, inflammation, immune modulation, seborrhea, endometriosis, polycystic ovary syndrome, androgenic alopecia, hypogonadism, osteoporosis, suppressing spermatogenesis, libido, cachexia, anorexia, inhibition of muscular atrophy in ambulatory patients, androgen supplementation for age related decreased testosterone levels in men, cancers expressing the estrogen receptor, prostate cancer, breast cancer, endometrial cancer, hot flushes, vaginal dryness, menopause, amenorrhea, dysmenorrhea, contraception, pregnancy termination, cancers containing the progesterone receptor, endometriosis, cachexia, menopause, cyclesynchrony, meningioma, fibroids, labor induction, autoimmune diseases, Alzheimer's disease, psychotic disorders, drug dependence, non-insulin dependent Diabetes Mellitus, dopamine receptor mediated disorders, congestive heart failure, dysregulation of cholesterol homeostasis, and attenuating the metabolism of a pharmaceutical agent.

16. A method for preparation of a compound of the following formula XVI, or salt thereof:



where

G is an aryl or heterocyclo group, where said group is mono- or polycyclic, and which

- 5 is optionally substituted at one or more positions;

Z₁ is O, S, NH, or NR⁶;

Z₂ is O, S, NH, or NR⁶;

A₁ is CR⁷ or N;

A₂ is CR⁷ or N;

- 10 Y' is J-J'-J'' where J is (CR⁷R^{7'})_n and n = 0-3, J' is O, S, S=O, SO₂, NH, NR⁷,
OP=OOR², OC=O, NR¹C=O, OP=ONHR², OSO₂, NNNH, NHNH⁶, NR⁶NH,
or N=N, and J'' is (CR⁷R^{7'})_n and n = 0-3;

Q₁ is H, alkyl or substituted alkyl, alkenyl or substituted alkenyl, cycloalkyl or
substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl,

- 15 heterocycloalkyl or substituted heterocycloalkyl, arylalkyl or substituted
arylalkyl, alkynyl or substituted alkynyl, aryl or substituted aryl, heterocyclo
or substituted heterocyclo, halo, CN, R¹OC=O, R⁴C=O, R⁵R⁶NC=O,
HO CR⁷R^{7'}, nitro, R¹OCH₂, R¹O, NH₂, C=OSR¹, SO₂R¹ or NR⁴R⁵;

Q₂ is H, alkyl or substituted alkyl, alkenyl or substituted alkenyl, cycloalkyl or

- 20 substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl,
heterocycloalkyl or substituted heterocycloalkyl, arylalkyl or substituted
arylalkyl, alkynyl or substituted alkynyl, aryl or substituted aryl, heterocyclo
or substituted heterocyclo, halo, CN, R¹OC=O, R⁴C=O, R⁵R⁶NC=O,
HO CR⁷R^{7'}, nitro, R¹OCH₂, R¹O, NH₂, C=OSR¹, SO₂R¹ or NR⁴R⁵;

- 25 L is a bond, (CR⁷R^{7'})_n, NH, NR⁵ or NR⁵(CR⁷R^{7'})_n, where n = 0-3;

R¹ and R^{1'} are each independently H, alkyl or substituted alkyl, cycloalkyl or
substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo
or substituted heterocyclo, cycloalkylalkyl or substituted cycloalkylalkyl,

cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or substituted heterocycloalkyl, aryl or substituted aryl, arylalkyl or substituted arylalkyl;

- 5 R^2 is alkyl or substituted alkyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo, cycloalkylalkyl or substituted cycloalkylalkyl, cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or substituted heterocycloalkyl, aryl or substituted aryl, arylalkyl or substituted arylalkyl;

- 10 R^4 is H, alkyl or substituted alkyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo, cycloalkylalkyl or substituted cycloalkylalkyl, cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or substituted heterocycloalkyl, aryl or substituted aryl, arylalkyl or substituted arylalkyl, $R^1C=O$, $R^1NHC=O$, SO_2OR^1 , or $SO_2NR^1R^{1'}$;

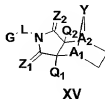
- 15 R^5 is alkyl or substituted alkyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo, cycloalkylalkyl or substituted cycloalkylalkyl, cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or substituted heterocycloalkyl, aryl or substituted aryl, arylalkyl or substituted arylalkyl, $R^1C=O$, $R^1NHC=O$, SO_2R^1 , SO_2OR^1 , or $SO_2NR^1R^{1'}$;

- 20 R^6 is alkyl or substituted alkyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo, cycloalkylalkyl or substituted cycloalkylalkyl, cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or substituted heterocycloalkyl, aryl or substituted aryl, arylalkyl or substituted arylalkyl, CN, OH, OR^1 , $R^1C=O$, $R^1NHC=O$, SO_2R^1 , SO_2OR^1 , or $SO_2NR^1R^{1'}$; and

- 25 R^7 and $R^{7'}$ are each independently H, alkyl or substituted alkyl, alkenyl or substituted alkenyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo, cycloalkylalkyl or substituted cycloalkylalkyl, cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or substituted heterocycloalkyl, aryl or

substituted aryl, arylalkyl or substituted arylalkyl, halo, CN, OR¹, nitro, hydroxylamine, hydroxylamide, amino, NHR⁴, NR²R³, NOR¹, thiol, alkylthio or substituted alkylthio, R¹C=O, R¹OC=O, R¹NHC=O, SO₂R¹, SOR¹, PO₃R¹R^{1'}, R¹R^{1'}NC=O, C=OSR¹, SO₂R¹, SO₂OR¹, or SO₂NR¹R^{1'};

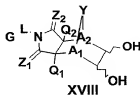
- 5 comprising the steps of contacting a compound of the following formula XV, or salt thereof:



- 10 where the symbols are as defined above;
with an enzyme or microorganism capable of catalyzing the hydroxylation of said compound XV to said compound XVI, and effecting said hydroxylation.

17. A method for preparation of a compound of the following formula

- 15 XVIII, or salt thereof:



where

- 20 G is an aryl or heterocyclo group, where said group is mono- or polycyclic, and which is optionally substituted at one or more positions;

Z₁ is O, S, NH, or NR⁶;

Z₂ is O, S, NH, or NR⁶;

A₁ is CR⁷ or N;

- 25 A₂ is CR⁷ or N;

Y' is J-J'-J'' where J is (CR⁷R^{7'})_n and n = 0-3, J' is O, S, S=O, SO₂, NH, NR⁷,

OP=OOR², OC=O, NR¹C=O, OP=ONHR², OSO₂, NHNH, NHNR⁶, NR⁶NH,

or N=N, and J'' is (CR⁷R^{7'})_n and n = 0-3;

- Q₁ is H, alkyl or substituted alkyl, alkenyl or substituted alkenyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocycloalkyl or substituted heterocycloalkyl, arylalkyl or substituted arylalkyl, alkynyl or substituted alkynyl, aryl or substituted aryl, heterocyclo
5 or substituted heterocyclo, halo, CN, R¹OC=O, R⁴C=O, R⁵R⁶NC=O, HO CR⁷R^{7'}, nitro, R¹OCH₂, R¹O, NH₂, C=OSR¹, SO₂R¹ or NR⁴R⁵;
- Q₂ is H, alkyl or substituted alkyl, alkenyl or substituted alkenyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocycloalkyl or substituted heterocycloalkyl, arylalkyl or substituted
10 arylalkyl, alkynyl or substituted alkynyl, aryl or substituted aryl, heterocyclo or substituted heterocyclo, halo, CN, R¹OC=O, R⁴C=O, R⁵R⁶NC=O, HO CR⁷R^{7'}, nitro, R¹OCH₂, R¹O, NH₂, C=OSR¹, SO₂R¹ or NR⁴R⁵;
- L is a bond, (CR⁷R^{7'})_n, NH, NR⁵ or NR⁵(CR⁷R^{7'})_n, where n = 0-3;
- R¹ and R^{1'} are each independently H, alkyl or substituted alkyl, cycloalkyl or
15 substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo, cycloalkylalkyl or substituted cycloalkylalkyl, cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or substituted heterocycloalkyl, aryl or substituted aryl, arylalkyl or substituted arylalkyl;
- 20 R² is alkyl or substituted alkyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo, cycloalkylalkyl or substituted cycloalkylalkyl, cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or substituted heterocycloalkyl, aryl or substituted aryl, arylalkyl or substituted arylalkyl;
- 25 R⁴ is H, alkyl or substituted alkyl, cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl, heterocyclo or substituted heterocyclo, cycloalkylalkyl or substituted cycloalkylalkyl, cycloalkenylalkyl or substituted cycloalkenylalkyl, heterocycloalkyl or substituted heterocycloalkyl, aryl or substituted aryl, arylalkyl or substituted arylalkyl, R¹C=O, R¹NHC=O,
30 SO₂OR¹, or SO₂NR¹R^{1'};

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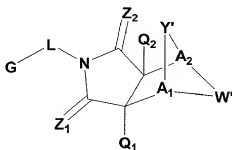
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18. A compound of the following formula Ib:



Ib

where G, Z₁, Z₂, Q₁ and Q₂ are as defined in claim 1;

Y' is J-J'ⁿ where J is (CR⁷R'^{7'})_n and n = 0-3, J' is a bond or O, S, S=O, SO₂, NH,

NR⁷, CR⁷R'^{7'}, R²P=O, R²P=S, R²OP=O, R²NHP=O, OP=OOR², OP=ONHR²,

OSO₂, NHNH, NHNR⁶, NR⁶NH, N=N, cycloalkyl or substituted cycloalkyl,

cycloalkenyl or substituted cycloalkenyl, or heterocyclo or substituted

heterocyclo, and J'' is (CR⁷R'^{7'})_n and n = 0-3, where Y is not a bond; and

W' is CR⁷R'^{7'}—CR⁷R'^{7'}, CR⁷R'^{7'}—C=O, NR⁹—CR⁷R'^{7'}, N=CR⁸, N=N, NR⁹—NR^{9'},

cycloalkyl or substituted cycloalkyl, cycloalkenyl or substituted cycloalkenyl,

heterocyclo or substituted heterocyclo, or aryl or substituted aryl, wherein,

when W' is not NR⁹—CR⁷R'^{7'}, N=CR⁸, N=N, NR⁹—NR^{9'}, or heterocyclo or substituted

heterocyclo, then J' must be O, S, S=O, SO₂, NH, NR⁷, OP=OOR²,

OP=ONHR², OSO₂, NHNH, NHNR⁶, NR⁶NH, or N=N; or alternatively,

Y' is CR⁷R'^{7'}—C=O and W' is NR⁹—CR⁷R'^{7'};

L is a bond; and

A₁ and A₂ are as defined above with the proviso that, when Y' = O and W' = -CH₂-

CH₂-, then at least one of A₁ or A₂ is not CH;

with the further provisos (2), (3), (6), (7) and (8) of claim 1.